

AD-A104 199

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
19310A MLRS, MISSILE NUMBERS BNO-14, BNO-33, AND BNO-34, ROUND --ETC(U)

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METEOROLOGICAL DATA REPORT

19310A MLRS

Missile Numbers BNO-14, BNO-33, BNO-34
Round Numbers V-175/MD-36, V-177/MD-38, V-176/MD-37
24 July 1981

by

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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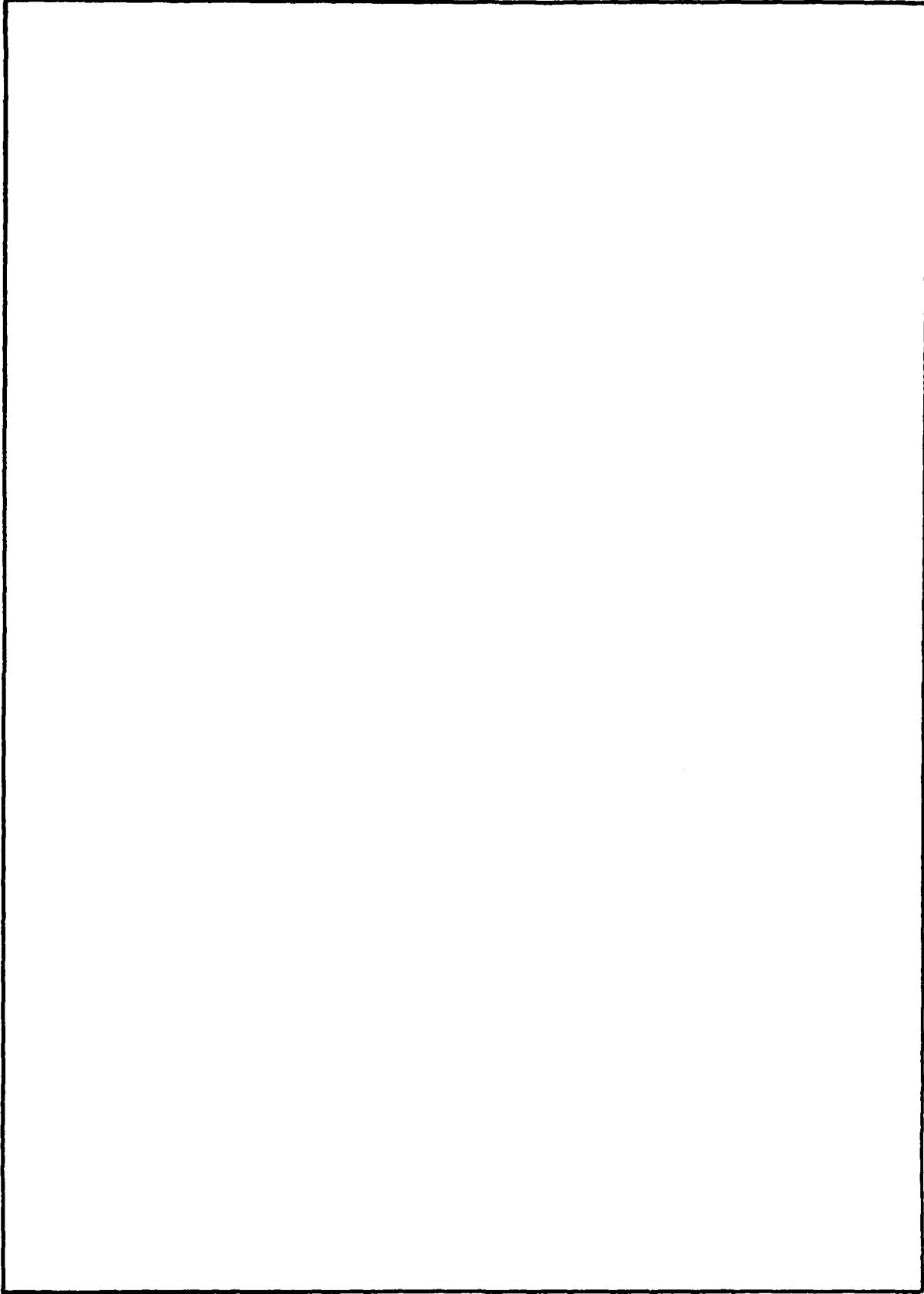
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INTRODUCTION

19310A MLRS, Missile Numbers BNO-14, BNO-33, and BNO-34, Round Numbers V-175/MD-36, V-176/MD-37 and V-177/MD-38, were launched from BRILLO, White Sands Missile Range (WSMR), New Mexico, at 1505:08, 1505:13 and 1631:05 MDT, 24 July 1981. The scheduled launch times were 1500, 1500:04.5 and 1500:09 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations:

a. Surface.

(1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m³), wind direction and speed, and cloud cover were made at the D-3 1/2 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air:

(1) Low level wind data were obtained from Pilot-Balloon observations at:

SITE AND ALTITUDE

D-3 1/2	2000 Meters
MAL	1750 Meters
MAL	1750 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

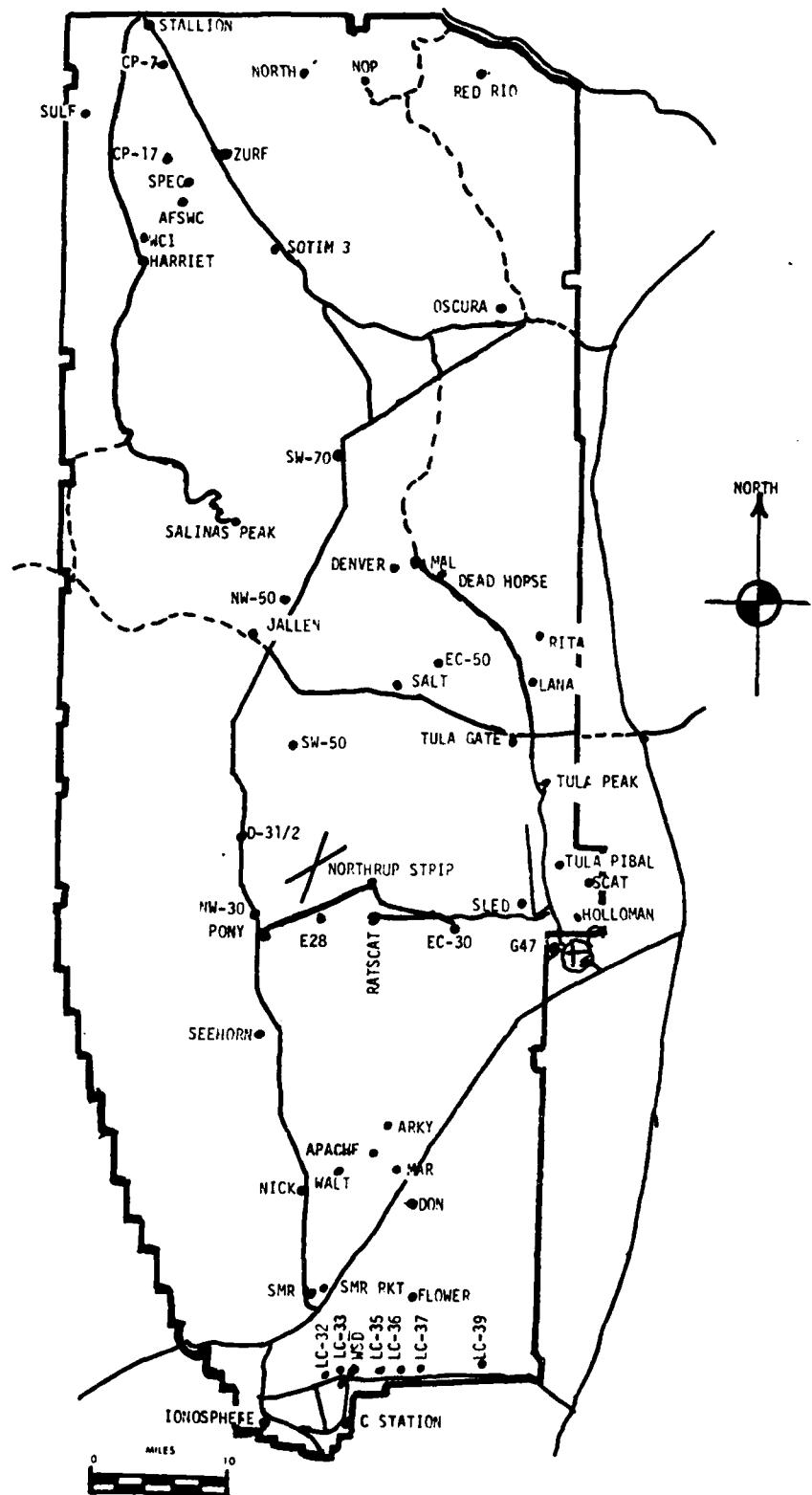
SITE AND TIME

WSD	1000 MDT
NW-30	1200 MDT
Jallen	1230 MDT
NW-30	1500 MDT
Jallen	1700 MDT

Accession For	<input checked="" type="checkbox"/>
NTIS SPA&I	<input type="checkbox"/>
DTIC T&E	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	<input type="checkbox"/>
By	<input type="checkbox"/>
Distribution/	<input type="checkbox"/>
Availability Codes	<input type="checkbox"/>
Auth and/or	<input type="checkbox"/>
Dist	<input type="checkbox"/>
Special	<input type="checkbox"/>

A

WSMR METEOROLOGICAL SITES



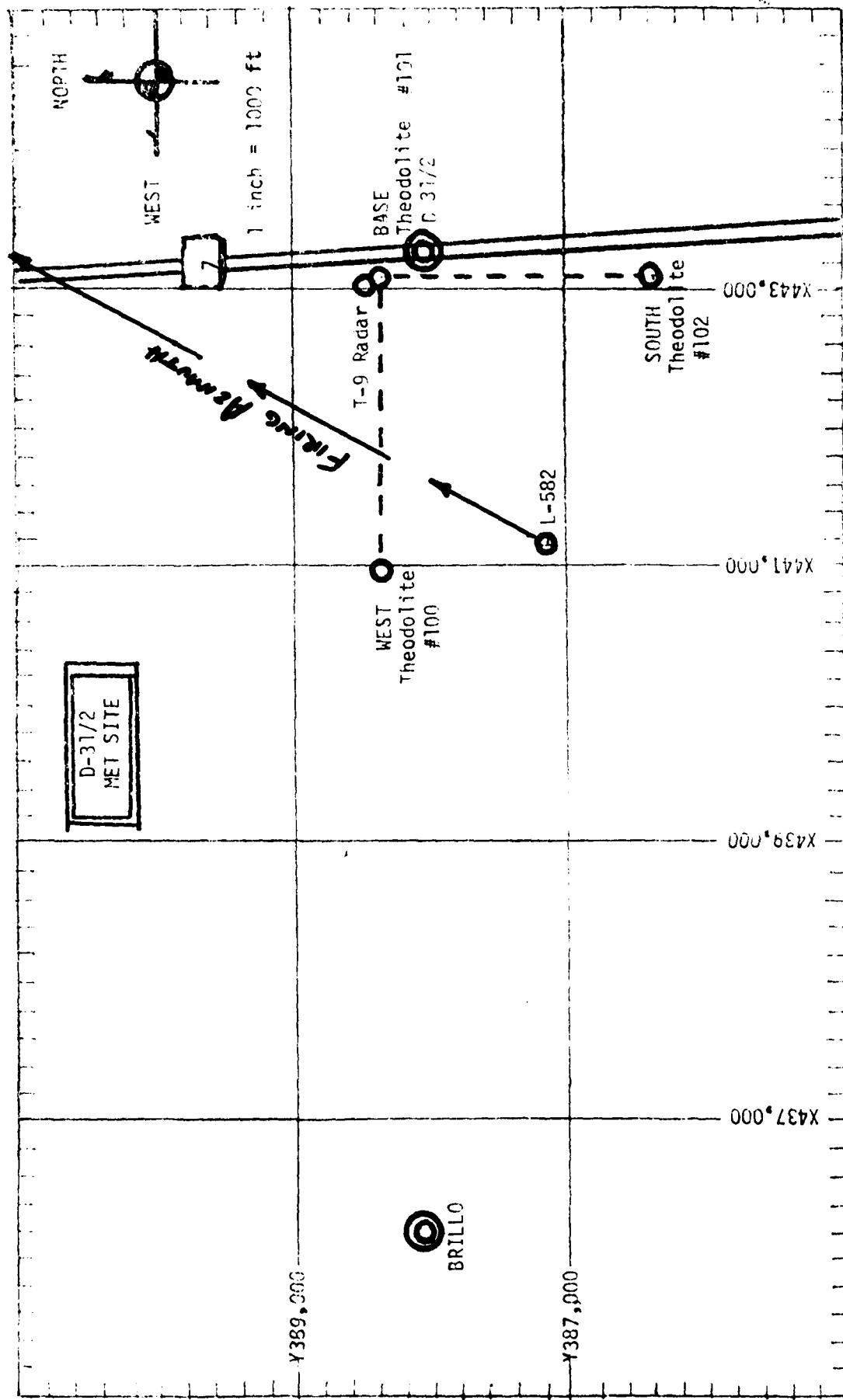


TABLE 2T-TIME PILOT-BALLOON MEASURED WIND DATA
DATE 24 July 1981

SITE: D-3 1/2
TIME: 1500 MDT
WSTM COORDINATES:
X= 443,093.12
Y= 388,317.32
H= 3,964.34

SITE: MAL
TIME: 1500 MDT
WSTM COORDINATES:
X= 509,421.05
Y= 495,563.18
H= 4,126.81

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	270	02	SURFACE	240	02
150	M I S G		150	211	07
210	M I S G		210	207	07
270	154	09	270	204	07
330	166	07	330	201	07
390	169	06	390	187	07
500	150	06	500	178	06
650	122	03	650	189	05
800	108	03	800	197	03
950	147	06	950	227	01
1150	155	06	1150	237	04
1350	206	07	1350	244	10
1550	224	07	1550	240	13
1750	225	08	1750	232	13
2000	226	09	2000	M I S G	

Data obtained from Single Theodolite
Tracked Pilot-Balloon observation.

Data obtained from Double Theodolite
Tracked Pilot-Balloon observation.

TABLE 3T-TIME PILOT-BALLOON MEASURED WIND DATA
DATE 24 July 1981

SITE: MAL
TIME: 1640 MDT
WSTN COORDINATES:
X= 509,421.05
Y= 495,563.18
H= 4,126.81

SITE:
TIME:
WSTN COORDINATES:
X= _____
Y= _____
H= _____

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	250	04	SURFACE		
150	224	06	150		
210	220	06	210		
270	222	07	270		
330	208	05	330		
390	187	05	390		
500	223	08	500		
650	238	14	650		
800	240	12	800		
950	243	08	950		
1150	240	07	1150		
1350	225	05	1350		
1550	248	08	1550		
1750	237	04	1750		
2000	M I S G		2000		

Data obtained from Double Theodolite
Tracked Pilot-Balloon observation.

TABLE 4AIMING AND T-TIME COMPUTER MET MESSAGES
24 July 1981

WSD	1000 MDT	NW-30	1200 MDT	JALLEN	1330 MDT
METCM1324064		METCM1329065		METCM1332065	
241600122881		241800123880		241950124877	
00133002	30520881	00213003	30890880	00267005	31220877
01105004	30390871	01149003	30680870	01271004	20890867
02065004	30100847	02066004	30360846	02222006	30540843
03114003	29800809	03014004	30010809	03295004	20160806
04100004	29560764	04627003	29580764	04502003	29700762
05561006	29180721	05436003	29210721	05403003	29250719
06589003	28800680	06414003	28840680	06444077	28850678
07014001	28350640	07430005	28410640	07441009	28430639
08373008	27910603	08411007	27970603	08424010	27990601
09411005	27490567	09412007	27600567	09457008	27590565
10347003	27070533	10363007	27220533	10466009	27170531
11422005	26730500	11434009	26850500	11482010	26760499
12349011	26330454	12374015	26410454	12398012	26320453
13334016	25610398	13360017	25700399	13364021	25660397
14363009	29490348	14383011	25070349	14381017	24970347
15340010	24210303	15376009	24260304	15386016	24260303
16371007	23530263	16396014	23560263	16397018	23540262
17523010	22760227	17483015	22790227	17451019	22750227
18526010	21950195	18483014	22010195	18483019	22030195
19496011	21190166	19456016	21360167	19462017	21360166
20544020	20600141	20522020	20730142	20527021	20740142
21582013	20190120	21561012	20300121	21558009	20360120
22170001	20460101	22097005	20360102	22260001	20330102
23172015	20610086	23238013	20850086	23269010	20820086
24191008	20920073	24111005	21070074	24111005	21050073
25182024	21370062	25214016	21410063	25194013	21400062
26189023	21610053	26188019	21680054	26177017	21600053

TABLE 5AIMING AND T-TIME COMPUTER MET MESSAGES
24 July 1981

NW-30	1500 MDT	JALLEN	1700 MDT
METCM1329065		METCM1332065	
242100123878		242300124874	
00133004	31130878	00391005	31080874
01169005	31060868	01353008	31030864
02169009	30750844	02333007	30770841
03173008	30330807	03391002	30390804
04240004	29810763	04483008	29910760
05442011	29340720	05498009	29430717
06449012	28910679	06528009	28960677
07480010	28470640	07516008	28500638
08441005	28030603	08463005	28030600
09457007	27630567	09444007	27600565
10489009	27260533	10433008	27230531
11451011	26860500	11414012	26830498
12362015	26390454	12372016	26310452
13358020	25680399	13371018	25720397
14370014	25020349	14385018	25030347
15379017	24220304	15425015	24270302
16391015	23540263	16401017	23430262
17452015	22740227	17461015	22610226
18502014	21950195	18514014	21860194
19484016	21180167	19494016	21110166
20546020	20620142	20528020	20560141
21578001	20330120	21387010	20320119
22332002	20280102	22354009	20310101
23269012	20700086	23444004	20850086
24120009	20960073	24174017	21180073
25195016	21410062	25157012	21350062
26165017	21540053	26122021	21680053

STATION ALTITUDE 3489.00 FEET MSL
24 JULY 61 1000 HRS PDT
ASCENSUS 1.0. 475

SIGNIFICANT LEVEL DATA
2050020473
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 6

PRESSURE MILLIBARS	GEODETIC ALTITUDE FEET	TEMPERATURE DEGREES CENTIGRADE	HUM. PERCENT
880.6	3989.0	30.3	35.0
850.0	5020.7	26.0	44.0
780.2	7482.0	21.3	43.0
751.0	8566.7	20.5	49.0
700.0	10547.7	16.0	43.0
650.2	12337.7	11.0	51.0
637.8	13116.1	9.1	59.0
609.0	14369.3	6.1	49.0
580.0	15676.3	2.5	54.0
545.0	17321.5	-1.0	44.0
516.1	18741.8	-5.1	75.0
500.0	19559.7	-6.5	-11.0
493.2	19912.1	-6.2	-16.6
477.2	20758.4	-7.9	-19.1
469.2	21190.5	-8.4	-23.6
461.4	21616.1	-8.7	-25.1
400.0	25204.1	-16.7	-30.1
375.8	26734.4	-21.0	-35.0
361.2	27696.4	-21.8	-32.8
347.0	28665.4	-23.5	-30.4
332.8	29666.8	-25.9	-33.0
319.4	30642.4	-28.2	-35.0
311.8	31209.4	-30.0	-35.1
300.0	32111.4	-31.6	-40.2
291.8	32755.9	-32.5	-45.6
250.0	36286.5	-40.4	-49.9
200.0	41168.6	-52.5	-55.0
155.8	46351.7	-63.9	-67.2
150.0	47116.5	-64.9	-68.0
137.4	48068.3	-69.0	-72.6
112.9	52804.3	-72.6	-76.2
100.0	55100.5	-67.2	-76.4
85.4	58005.2	-68.0	-76.9
80.0	59543.4	-64.9	-70.4
76.4	60468.8	-65.7	-70.0
70.0	62238.9	-62.2	-66.4
55.4	67078.3	-56.4	-61.0
50.0	69227.1	-56.9	-61.0
39.6	74129.4	-55.1	-59.3
30.0	80157.6	-50.3	-54.0

STATION ALTITUDE 3,889.00 FEET MSL
24 JULY 1961 1000 IRS MDI
ASSEMBLY NO. 475

SIGNIFICANT LEVEL DATA

2050020475
WHITF. SAWNS

OUTDOOR COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 6 CON'T

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
20.0	86880.6	-47.0	
13.8	97152.5	-39.7	

STATION NUMBER 398400 FEET MSL
24 JULY 1 10th hrs MDT
ASCENSION, U.O. 475

UPPER AIR UNA
2050020473
WHITE SANDS

GEODETIC COORDINATES
32.4043 LAT DEG
106.37033 LONG DEG

TABLE 7

GEODETIC ALITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	SLANT DIST. METER	GM/CUBIC METER	WIND KNOTS	DIRECTION DEGREES (TIN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION.
3489.0	880.6	30.3	13.1	35.0	1004.4	680.9	75.0	1.9	1.000266
4000.0	860.3	30.3	13.1	35.1	1004.1	680.8	74.7	1.9	1.000266
4500.0	860.3	28.2	13.1	39.5	993.8	678.5	39.8	.4	1.000264
5000.0	850.6	26.1	12.8	43.8	983.7	676.1	65.4	11.6	1.000282
5500.0	835.9	25.1	11.9	43.8	970.3	674.9	24.4	11.7	1.000276
6000.0	821.5	24.1	11.0	43.6	950.9	673.7	23.5	11.7	1.000270
6500.0	807.3	23.2	10.1	43.4	943.6	672.6	22.6	11.8	1.000264
7000.0	793.4	22.2	9.1	43.2	930.6	671.4	21.7	11.8	1.000258
7500.0	779.7	21.3	8.2	42.9	917.6	670.3	20.6	11.9	1.000252
8000.0	766.1	20.9	7.2	41.1	903.0	669.7	19.9	11.9	1.000246
8500.0	752.8	20.5	6.2	39.2	888.6	669.2	19.1	12.0	1.000240
9000.0	739.5	19.5	5.5	39.9	876.2	668.0	18.2	12.1	1.000235
9500.0	726.5	18.4	4.9	40.9	864.3	666.7	17.3	12.1	1.000231
10000.0	713.7	17.2	4.2	41.9	852.5	665.5	16.5	12.2	1.000227
10500.0	701.2	16.1	3.5	42.9	840.9	664.0	15.9	10.9	1.000223
11000.0	688.7	14.7	2.9	45.0	829.9	662.4	32.2	5.2	1.000219
11500.0	676.3	13.3	2.4	47.3	819.1	660.7	318.5	2.7	1.000216
12000.0	664.2	11.9	1.7	49.5	808.5	659.1	340.9	1.6	1.000212
12500.0	652.3	10.6	1.3	52.7	797.7	657.5	347.9	.8	1.000209
13000.0	640.5	9.4	1.5	57.8	786.6	650.2	200.8	.2	1.000208
13500.0	628.8	8.2	-.1	55.9	775.6	654.6	208.6	.3	1.000202
14000.0	617.3	7.0	-2.2	51.9	765.3	653.1	207.9	4.8	1.000196
14500.0	606.0	5.7	-4.0	49.5	754.9	651.5	209.2	6.2	1.000190
15000.0	594.8	4.4	-4.8	51.4	744.7	649.9	210.2	7.5	1.000187
15500.0	582.8	3.0	-5.6	53.3	734.6	648.2	219.3	6.5	1.000184
16000.0	572.9	1.8	-7.0	52.0	724.2	646.8	230.9	5.7	1.000179
16500.0	562.2	.7	-8.7	49.0	713.5	645.4	230.8	5.1	1.000175
17000.0	551.7	-.3	-10.5	46.0	703.1	644.1	227.6	4.5	1.000171
17500.0	541.3	-1.5	-11.1	47.9	692.9	642.7	210.2	3.9	1.000168
18000.0	531.0	-3.0	-9.9	58.8	683.2	641.0	200.7	3.5	1.000167
18500.0	520.9	-4.4	-9.1	69.1	673.7	639.4	207.5	3.1	1.000166
19000.0	511.0	-5.5	-9.5	73.4	663.7	638.0	223.3	3.5	1.000164
19500.0	501.2	-6.4	-10.9	70.4	653.2	636.9	230.4	4.7	1.000160
20000.0	491.5	-6.4	-18.8	36.4	641.2	636.6	237.3	5.1	1.000159
20500.0	482.0	-7.4	-19.0	38.8	631.2	632.4	235.9	5.4	1.000148
21000.0	472.7	-8.2	-21.5	33.5	620.9	634.4	222.9	6.4	1.000144
21500.0	462.5	-8.6	-24.7	25.8	610.0	635.1	219.4	8.0	1.000140
22000.0	454.4	-9.6	-25.6	25.5	600.2	632.7	195.9	10.8	1.000136
22500.0	445.5	-10.7	-26.3	26.2	590.9	631.4	168.7	13.2	1.000136
23000.0	436.7	-11.8	-27.0	26.9	581.7	630.0	183.4	15.6	1.000135

STATION AT IRVING 3489.00 FEET MSL
24 JULY '41 1000 IRS MDT
ASSTNSIO. 40. 475

IPPIR AIR. DATA

2150020475
WHITE SAILORS

TABLE 7 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION LIGHTS (IN)	INDEX OF REFRACTION
23500.0	420.1	-12.9	-27.7	572.7	028.7	106.7	16.4
24000.0	419.6	-14.0	-28.4	563.6	027.3	109.6	17.1
24500.0	411.4	-15.1	-29.1	555.1	025.9	100.9	16.9
25000.0	405.3	-16.2	-29.8	546.6	024.6	191.9	16.6
25500.0	399.2	-17.5	-30.7	538.4	023.0	109.2	15.8
26000.0	387.2	-18.9	-31.6	530.4	021.3	100.0	15.0
26500.0	379.4	-20.3	-32.5	522.0	019.5	105.0	14.5
27000.0	371.7	-21.2	-32.9	513.4	018.5	104.9	13.6
27500.0	364.1	-21.6	-32.8	504.2	018.0	102.5	10.9
28000.0	359.7	-22.3	-31.9	495.2	017.1	205.3	8.9
28500.0	349.4	-23.2	-30.7	486.7	016.1	214.7	8.0
29000.0	342.2	-24.3	-31.2	478.6	014.7	219.1	7.9
29500.0	335.1	-25.5	-32.6	471.2	013.2	209.7	9.0
30000.0	328.2	-26.7	-32.9	455.6	011.7	205.0	9.8
30500.0	321.3	-27.9	-33.0	450.2	010.3	197.5	10.1
31000.0	314.6	-29.3	-34.3	449.3	010.4	195.3	10.2
31500.0	307.9	-30.5	-36.6	442.0	010.9	190.0	10.2
32000.0	301.4	-31.4	-39.5	434.3	010.5	188.8	10.2
32500.0	295.0	-32.1	-43.3	426.4	010.4	199.3	10.2
33000.0	288.7	-33.0	-46.0	418.8	010.7	192.1	10.3
33500.0	282.4	-34.2	-46.5	411.7	010.3	196.2	10.6
34000.0	276.3	-35.3	-47.0	404.6	010.9	194.3	10.1
34500.0	270.3	-36.4	-47.6	397.6	010.5	189.4	9.3
35000.0	264.5	-37.5	-48.2	391.0	010.0	195.5	7.3
35500.0	258.8	-38.6	-48.8	384.4	010.6	204.3	5.2
36000.0	253.2	-39.8	-49.5	377.8	010.2	205.3	5.6
36500.0	247.6	-40.9	-50.7	371.4	010.7	202.5	9.5
37000.0	242.0	-42.2	-52.8	364.9	010.2	209.6	10.8
37500.0	236.5	-43.4	-54.9	358.6	010.5	294.2	11.4
38000.0	231.2	-44.6	-57.2	352.4	010.9	295.0	10.1
38500.0	225.9	-45.9	-59.6	346.3	010.5	297.3	8.3
39000.0	220.8	-47.1	-62.2	340.4	010.7	294.5	8.4
39500.0	215.8	-48.4	-65.2	334.5	010.4	295.4	8.9
40000.0	211.0	-49.6	-68.7	328.8	010.1	295.1	9.2
40500.0	206.2	-50.8	-73.5	325.1	010.9	292.9	9.4
41000.0	201.5	-52.1	-82.9	317.0	010.2	294.0	9.4
41500.0	196.8	-53.2	-97.1	311.8	010.8	577.7	9.3
42000.0	192.1	-54.3	-8.4**	305.9	010.5	290.7	9.3
42500.0	187.6	-55.4	-50.8	300.1	010.1	574.8	9.3
43000.0	183.1	-56.5	-1.2**	296.5	010.5	295.4	9.4

* ALL LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN INTERPOLATION.

STATION LATITUDE 39°89.00 FEET MSL
24 JULY 1961 1000 HRS MDT
ASLUSIOR, .0. 475

UPPLR AIR UNITS

2050020475
WHITE SANDS

1000 HRS MDT

TABLE 7 CON'T

GEODETIC COORDINATES
32°40'04.3 LAT DEG
106°37'33.3 LONG DEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	GR/CUBIC METER	SOUND METERS	SPEED OF WIND DATA KNOTS DEGREES (1NN)	WIND DATA KNOTS	INDEX OF REFRACTION
43500.0	170.7	-57.6			288.9	571.9	293.2	9.6	1.0000004
44000.0	174.5	-5d.7			283.5	570.5	289.7	10.0	1.0000003
44500.0	170.3	-59.8			278.2	569.0	280.1	10.5	1.0000002
45000.0	166.3	-60.9			273.0	567.5	282.1	11.1	1.0000001
45500.0	162.3	-62.0			267.8	566.1	277.7	11.6	1.0000000
46000.0	156.5	-63.1			262.8	564.6	276.2	12.5	1.0000059
46500.0	154.7	-64.1			257.7	563.3	284.0	14.3	1.0000057
47000.0	150.9	-64.7			252.2	562.4	290.0	16.3	1.0000056
47500.0	147.1	-65.6			247.0	561.3	296.3	18.2	1.0000055
48000.0	145.5	-66.5			241.9	560.1	301.5	20.2	1.0000054
48500.0	146.0	-67.3			236.9	558.9	305.0	20.9	1.0000053
49000.0	139.5	-68.2			231.9	557.8	307.9	20.9	1.0000052
49500.0	132.0	-68.7			226.7	557.0	311.5	20.5	1.0000051
50000.0	129.7	-69.3			221.7	556.2	316.5	19.7	1.0000049
50500.0	120.4	-69.9			216.7	555.4	321.7	18.9	1.0000048
51000.0	123.2	-70.5			211.8	554.6	325.8	17.2	1.0000047
51500.0	120.1	-71.1			207.1	553.8	330.8	15.6	1.0000046
52000.0	117.1	-71.7			202.5	553.0	330.7	12.4	1.0000045
52500.0	114.2	-72.2			197.9	552.2	329.0	8.9	1.0000044
53000.0	111.3	-72.1			192.9	551.3	329.4	5.9	1.0000043
53500.0	106.5	-71.0			186.9	550.0	334.6	3.2	1.0000042
54000.0	105.0	-69.8			181.2	555.6	359.4	1.1	1.0000040
54500.0	103.1	-68.6			175.6	557.2	64.3	.5	1.0000039
55000.0	100.5	-67.4			170.2	558.8	124.6	1.1	1.0000038
55500.0	96.0	-67.3			165.9	559.9	102.6	2.4	1.0000037
56000.0	95.6	-67.4			161.9	558.7	93.4	4.0	1.0000036
56500.0	93.2	-67.6			157.9	558.6	82.4	6.0	1.0000035
57000.0	90.9	-67.7			154.1	558.4	73.0	11.6	1.0000034
57500.0	86.6	-67.9			150.4	558.2	70.0	16.4	1.0000033
58000.0	86.4	-68.0			146.8	558.0	71.7	15.9	1.0000033
58500.0	84.3	-67.0			142.4	559.4	74.3	14.9	1.0000032
59000.0	82.2	-66.0			138.2	560.7	79.7	13.0	1.0000031
59500.0	80.2	-65.0			134.2	562.1	93.3	10.1	1.0000030
60000.0	76.2	-65.3			131.1	561.7	115.4	8.1	1.0000029
60500.0	70.3	-65.6			128.1	561.2	119.4	9.9	1.0000029
61000.0	74.4	-64.6			124.3	562.5	116.9	12.3	1.0000028
61500.0	72.6	-63.6			120.7	563.9	117.4	14.4	1.0000027
62000.0	70.8	-62.7			117.2	565.2	114.2	16.1	1.0000026
62500.0	68.1	-61.9			114.3	566.2	111.6	17.8	1.0000025
63000.0	67.5	-61.3			110.9	567.1	110.5	19.3	1.0000024

STATION ALTITUDE 3439.0 FEET MSL
24 JULY 1951 1000 HRS MDT
ASCR. 10.0. 475

UPPER AIR DATA
2050020475
WHITE SANDS

TABLE 7 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL.HUM. PERCENT	SPEED OF SOUND KNOTS	WIND DATA DEGREES (IN)	INDEX OF REFRACTION.
6350.0	65.9	-6.0.7		108.0	567.9	109.6	1.000024
6400.0	64.3	-6.0.1		105.1	568.7	109.1	1.000023
6450.0	62.8	-1.9.5		102.3	569.5	108.2	1.000023
6500.0	61.3	-58.9		99.6	570.3	107.3	1.000022
6550.0	59.8	-58.3		96.9	571.0	105.4	1.000022
6600.0	58.4	-57.7		94.4	571.8	102.9	1.000021
6650.0	57.0	-57.1		91.9	572.6	100.4	1.000020
6700.0	55.6	-56.5		89.4	573.4	102.9	1.000020
6750.0	54.3	-56.0		87.3	573.4	104.9	1.000019
6800.0	53.0	-56.6		85.3	573.3	106.6	1.000019
6850.0	51.8	-56.7		83.3	573.1	108.8	1.000019
6900.0	51.5	-56.8		81.4	573.0	110.6	1.000018
6950.0	49.4	-56.8		79.5	573.0	109.7	1.000018
7000.0	48.0	-56.6		77.5	573.3	107.4	1.000017
7050.0	47.1	-56.4		75.7	573.5	104.7	1.000017
7100.0	46.0	-56.2		73.8	573.8	102.5	1.000016
7150.0	44.9	-56.1		72.0	574.0	100.3	1.000016
7200.0	43.8	-55.9		70.3	574.2	97.7	1.000016
7250.0	42.8	-55.7		68.6	574.5	93.5	1.000015
7300.0	41.8	-55.5		66.9	574.7	89.7	1.000015
7350.0	40.8	-55.3		65.3	575.0	85.1	1.000015
7400.0	39.8	-55.1		63.7	575.2	77.6	1.000014
7450.0	38.9	-54.8		62.1	575.7	71.6	1.000014
7500.0	38.0	-54.4		60.5	576.2	68.6	1.000013
7550.0	37.1	-54.0		59.0	576.7	69.6	1.000013
7600.0	36.3	-53.6		57.6	577.3	71.9	1.000013
7650.0	35.4	-53.2		56.1	577.8	73.2	1.000012
7700.0	34.6	-52.8		54.7	578.3	77.3	1.000012
7750.0	33.8	-52.4		53.4	578.9	60.9	1.000012
7800.0	33.0	-52.0		52.0	579.4	69.3	1.000012
7850.0	32.3	-51.6		50.7	579.9	64.4	1.000011
7900.0	31.5	-51.2		49.5	580.5	65.4	1.000011
7950.0	30.8	-50.8		48.2	581.0	66.5	1.000011
8000.0	30.1	-50.3		47.0	581.5	68.0	1.000010
8050.0	29.4	-50.1		45.9	581.8	69.5	1.000010
8100.0	28.7	-49.9		44.8	582.0	70.6	1.000010
8150.0	28.1	-49.8		43.8	582.3	91.4	39.8
8200.0	27.4	-49.6		42.8	582.5	92.1	39.0
8250.0	26.8	-49.4		41.7	582.8	92.9	38.4
8300.0	26.2	-49.2		40.8	583.0	94.5	38.9

STATION ALTITUDE 3489.00 FEET MSL
 24 JULY 1961 10hr HRS MDT
 ASCENSIO. 1.0. 475

PP, R AIR DATA
 2050020473
 WHITE SANDS
 GEODETIC COORDINATES
 32°40'04.3 LAT N
 106.37033 LONG. DEG

TABLE 7 CON'T

GEODETIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	SHED OF SOUND METER	REL.HUM. GM/CUBIC METER	SHED OF SOUND KNOTS	DIRECTION DEGREES(11)	WIND DATA KNOTS	INFLUX OR REFRACTION
93500.0	25.6	-19.0			39.8	583.2	90.6	39.5	1.000009	
84100.0	25.0	-48.8			38.9	583.5	90.8	40.1	1.000009	
84500.0	24.5	-48.6			38.0	583.7	91.7	39.9	1.000008	
85100.0	25.9	-48.5			37.1	584.0	98.6	39.8	1.000008	
85500.0	25.4	-48.3			36.2	584.2	99.4	39.6	1.000008	
86100.0	25.8	-48.1			35.3	584.5	100.7	39.7	1.000008	
86500.0	25.3	-47.9			34.5	584.7	102.0	39.6	1.000008	
87100.0	21.8	-47.7			33.7	584.9	103.3	39.5	1.000007	
87500.0	21.3	-47.5			32.9	585.2	104.6	39.6	1.000007	
88100.0	20.8	-47.3			32.1	585.4	105.9	40.3	1.000007	
88500.0	20.4	-47.1			31.4	585.7	107.2	40.8	1.000007	
89100.0	19.9	-46.9			30.6	586.0	108.2	41.4	1.000007	
89500.0	19.5	-46.5			29.9	586.6	109.1	42.4	1.000007	
90100.0	19.0	-46.0			29.2	587.1	109.8	43.4	1.000006	
90500.0	18.6	-45.6			28.5	587.7	110.5	44.4	1.000006	
91100.0	18.2	-45.1			27.8	588.3	110.7	44.4	1.000006	
91500.0	17.8	-44.7			27.1	588.8	110.9	43.9	1.000006	
92000.0	17.4	-44.2			26.5	589.4	113.3	43.5	1.000006	
92500.0	17.0	-43.8			25.8	590.0	114.3	43.0	1.000006	
93000.0	16.6	-43.4			25.2	590.5	98.4	41.9	1.000005	
93500.0	16.3	-42.9			24.6	591.1	95.2	40.9	1.000005	
94000.0	15.9	-42.5			24.0	591.7	91.9	40.0	1.000005	
94500.0	15.5	-42.0			23.4	592.2			1.000005	
95000.0	15.2	-41.6			22.9	592.8			1.000005	
95500.0	14.9	-41.2			22.3	593.4			1.000005	
96000.0	14.5	-40.7			21.8	593.9			1.000005	
96500.0	14.2	-40.3			21.3	594.5			1.000005	
97000.0	13.9	-39.8			20.7	595.1			1.000005	

STATION ALTITUDE 3989.0 FEET MSL
24 JULY 1960 1000 HRS MD
ASCENSION NO. 475

MANDATORY LEVELS
20500±0.7
WHITE SANDS

GEODETIC COORDINATES
32°40'43" LAT
106°37'33" LONG

TABLE 8

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA DEGREES (TN)	WIND DATA KNOTS
		AIR DEGREES	DEGREES CENTIGRADE			
850.0	5017.	26.0	12.8	44.	25.3	11.6
800.0	6761.	22.7	9.6	45.	22.1	11.8
750.0	8597.	20.4	6.0	39.	18.9	12.0
700.0	10537.	16.0	3.4	43.	15.0	10.4
650.0	12584.	10.4	1.4	54.	345.1	.7
600.0	14752.	5.0	-4.4	51.	209.6	6.8
550.0	17059.	-5.	-10.8	45.	245.4	4.3
500.0	19532.	-6.5	-11.0	70.	237.4	4.8
450.0	22220.	-10.1	-25.9	26.	191.9	12.1
400.0	25161.	-16.7	-30.1	30.	191.1	16.3
350.0	28405.	-23.1	-30.6	49.	215.3	8.1
300.0	32046.	-31.6	-40.4	42.	186.9	10.2
250.0	36206.	-40.4	-49.9	35.	275.5	7.5
200.0	41067.	-52.5			294.5	9.3
175.0	43859.	-58.6			290.1	10.0
150.0	46987.	-64.9			291.1	16.7
125.0	50585.	-70.2			325.3	18.2
100.0	54928.	-67.2			127.8	1.2
80.0	59344.	-64.9			93.7	10.0
70.0	62023.	-62.2			113.1	16.8
60.0	65176.	-58.4			106.0	21.9
50.0	68964.	-56.9			110.9	25.4
40.0	73619.	-55.2			79.4	24.1
30.0	79712.	-50.3			88.0	42.3
25.0	83629.	-48.8			96.8	40.1
20.0	88459.	-47.0			108.0	41.2
15.0	94790.	-41.3				

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.00 FEET MSL
24 JULY 1961 1200 HRS NDT
ASCENSIO. NO. 67

SIGNIFICANT LEVEL DATA
2050220067
NW 30

PRESSURE

PRESSURE

GEOMETRIC

GEOMETRIC

ALTITUDE

ALTITUDE

DEGREES CENTIGRADE

DEGREES CENTIGRADE

AIR DEWPOINT

AIR DEWPOINT

PERCENT

PERCENT

GEODETIC COORDINATES
32° 08' 49" LAT LIG,
106° 49' 24" LONG LIG,

TABLE 9

			TEMPERATURE AIR DEWPOINT	REL.HUM.
MILLIBARS MSL FEET		DEGREES CENTIGRADE		PERCENT
679.0	4010.4	33.8	12.2	27.0
665.0	4484.7	31.0	11.4	30.0
650.0	5024.8	29.0	10.6	32.0
744.2	8047.2	19.5	4.4	37.0
700.0	10568.5	16.0	3.1	42.0
654.2	12444.0	11.4	.5	47.0
593.8	15073.4	4.1	-.3	73.0
552.4	16995.0	-.1	-.3	82.0
503.8	19399.3	-.5	-.1	84.0
500.0	19594.8	-.6	-.2	88.0
489.4	20623.1	-.7	-.6	44.0
465.2	21445.1	-.8	-.8	21.0
450.0	22290.6	-.9	-.9	16.0
400.0	25243.1	-.16	-.4	20.0
384.4	26223.0	-.18	-.9	21.0
370.2	27144.8	-.19	-.5	45.0
342.2	29053.4	-.23	-.6	34.0
315.6	30981.9	-.28	-.6	62.0
300.0	32170.8	-.31	-.5	64.0
290.6	32910.7	-.33	-.4	64.0
284.6	33393.0	-.34	-.6	33.0
278.6	33883.3	-.35	-.7	33.0
250.0	36343.8	-.40	-.2	32.0
200.0	41228.9	-.52	-.4	
150.0	47200.8	-.63	-.9	
133.2	49577.5	-.68	-.1	
111.2	53124.2	-.71	.5	
100.0	55205.4	-.69	.1	
91.4	56986.4	-.67	.4	
82.2	59123.9	-.62	.1	
70.4	60611.6	-.63	.7	
70.0	62393.5	-.61	.4	
63.0	64561.7	-.59	.4	
55.2	67316.2	-.56	.1	
50.0	69393.0	-.56	.4	
45.0	71236.3	-.55	.8	
40.0	73772.3	-.55	.8	
30.0	80238.5	-.49	.2	
23.6	85460.0	-.48	.0	
20.0	89098.6	-.44	.6	

STATION ALTITUDE 4,104 FEET MSL
24 JULY 1961 1200 HRS MDT
ASCENDANCE: 10.0. 0.7

SIGNIFICANT LEVEL DATA
2050220001
NW 30

TABLE 9 CON'T

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR DEMPINT DEGREES CENTIGRADE	REL.HUM. PERCENT
10.3	91073.1	-43.1	

STATION COORDINATES
52.88497 LAT DEG
106.49714 LONG DEG

STATION MOUNTAIN 4010.00 FEET MSL
24 JULY 1 1200 HRS MDT
ASCEND 100.00. 07

UPPER AIR DATA
215022000/1
NW 30

OUTLINE COORDINATES
32.88497 LAT DEG
106.49714 LONG DEG

TABLE 10

GEOMETRIC PRESSURE	TEMPERATURE	REL. HUM.	WEIGHT	STATE OF	WIND DATA	WIND SPEED	INFLUX
ALTIMETER	AIR DEWPOINT	PERCENT	GM/CUBIC	SOUND	DIRECTION	MILES/HOUR	OF
MSL FEET	MILLIARS	DEGREES	METER	KNOTS	DEGREES (10)	MI/H	REFRACTION
4010.0	879.3	33.8	12.2	27.0	992.4	034.6	2.9
4500.0	862.3	30.9	11.4	30.1	985.5	081.4	2.5
5000.0	850.7	29.1	10.7	31.9	974.9	079.2	2.8
5500.0	835.1	27.8	9.9	32.6	962.4	077.7	3.7
6000.0	821.7	26.6	9.1	33.3	949.9	076.3	2.5
6500.0	807.5	25.3	9.3	33.9	937.6	074.6	0.3
7000.0	792.6	24.1	7.5	34.6	925.5	073.3	3.9
7500.0	779.9	22.8	6.7	35.2	913.5	071.9	3.7
8000.0	766.5	21.6	5.9	35.9	901.7	070.4	2.8
8500.0	753.2	20.4	5.0	36.5	890.1	068.9	3.7
9000.0	740.2	19.2	4.3	37.4	878.3	067.5	1.6
9500.0	727.1	18.2	4.0	38.9	965.8	066.3	2.0
10000.0	714.3	17.2	3.6	40.3	853.6	065.2	2.8
10500.0	701.7	16.1	3.2	41.8	841.5	064.0	2.2
11000.0	689.2	14.9	2.5	43.2	830.0	062.6	3.4
11500.0	676.9	13.7	1.8	44.5	818.8	061.1	2.7
12000.0	664.8	12.5	1.1	45.8	807.7	059.7	2.4
12500.0	652.9	11.2	0.5	47.6	796.8	058.2	4.2
13000.0	640.9	9.9	0.6	52.5	786.0	056.6	2.4
13500.0	629.2	8.5	0.6	57.4	775.4	055.0	3.5
14000.0	617.8	7.1	0.4	62.4	765.0	053.4	5.5
14500.0	606.5	5.7	0.1	67.3	754.8	051.8	6.2
15000.0	595.4	4.3	-0.2	72.3	744.7	050.2	3.3
15500.0	584.3	3.0	-1.6	70.6	734.0	048.8	5.7
16000.0	573.5	2.2	-3.2	67.7	723.3	047.5	7.6
16500.0	562.8	1.1	-4.7	64.8	712.7	046.1	2.7
17000.0	552.3	0.1	-6.3	62.0	702.3	044.8	6.8
17500.0	541.8	-1.1	-7.3	62.4	692.0	043.4	4.2
18000.0	531.5	-2.0	-8.3	62.8	681.9	042.0	2.9
18500.0	521.5	-3.4	-9.4	63.3	672.0	040.5	1.6
19000.0	511.6	-4.6	-10.4	63.7	662.2	039.1	2.8
19500.0	501.8	-5.6	-11.9	60.9	652.1	037.4	6.8
20000.0	492.2	-6.4	-14.5	52.5	641.8	036.8	9.3
20500.0	482.7	-7.4	-17.0	45.7	631.9	035.5	10.9
21000.0	473.4	-8.0	-21.2	33.5	621.3	034.5	11.0
21500.0	464.2	-8.5	-27.0	20.7	610.7	034.0	12.9
22000.0	455.2	-9.3	-29.3	17.7	600.7	032.9	15.5
22500.0	446.3	-10.3	-31.0	16.3	591.1	031.8	17.0
23000.0	437.4	-11.4	-31.5	17.0	581.9	030.4	18.3
23500.0	428.8	-12.5	-32.0	17.6	572.9	029.1	18.7

STATION: 61111000 4010.40 FEET MSL
 24 JULY 11 1200 HRS NDT
 ASLTD10: 100. 57

PP, R AIR DATA
 205022000 /
 NW 30

TABLE 10 CON'T

OF UNIT THICK	PRESSURE ATMOSPHERE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CURIC METER	SOUND KNOTS	WIND DATA DEGREES (IN)	WIND DATA KNOTS	INDEX REFRACTION
24000.0	420.5	-13.6	-32.6	18.3	564.0	621.7	205.2	19.0
24500.0	416.0	-14.7	-33.2	19.0	555.3	626.4	204.4	19.3
25000.0	405.9	-15.9	-33.7	19.7	546.7	625.0	202.5	18.8
25500.0	395.9	-17.1	-34.5	20.3	538.3	623.5	199.4	17.8
26000.0	387.9	-18.3	-35.3	20.8	530.1	622.0	200.5	15.9
26500.0	380.1	-19.1	-32.9	28.2	520.9	621.1	203.7	13.7
27000.0	372.4	-19.4	-29.2	41.2	511.0	620.7	209.3	12.3
27500.0	364.8	-20.3	-23.7	46.7	502.3	619.7	215.4	11.2
28000.0	357.4	-21.3	-29.2	49.0	494.1	618.4	214.6	10.8
28500.0	350.1	-22.4	-29.7	51.4	486.1	617.1	214.1	10.3
29000.0	343.0	-23.5	-30.2	53.7	478.3	615.7	214.9	10.7
29500.0	335.8	-24.8	-31.0	55.9	470.6	614.2	215.7	11.2
30000.0	328.9	-26.1	-31.8	57.9	463.4	612.5	217.0	10.7
30500.0	322.0	-27.4	-32.7	60.0	456.2	610.9	218.4	10.1
31000.0	315.4	-28.6	-33.6	62.0	449.1	609.3	219.6	9.3
31500.0	308.7	-29.9	-34.6	62.9	441.9	607.8	218.1	8.6
32000.0	302.1	-31.1	-35.7	63.7	434.7	606.2	212.3	9.4
32500.0	295.8	-32.2	-36.6	64.0	427.4	604.9	207.3	10.3
33000.0	289.5	-33.2	-39.5	58.3	420.1	603.6	200.4	12.5
33500.0	283.3	-34.3	-44.8	33.0	413.0	602.2	197.1	14.7
34000.0	277.2	-35.4	-45.9	33.0	406.1	600.7	203.2	15.3
34500.0	271.1	-36.5	-46.9	32.7	399.0	599.4	212.3	9.4
35000.0	265.2	-37.5	-47.8	32.5	392.0	598.1	221.5	14.2
35500.0	259.5	-38.5	-48.8	32.3	385.1	596.4	236.0	13.2
36000.0	253.9	-39.5	-49.8	32.1	378.4	595.5	247.4	12.8
36500.0	248.2	-40.6	-51.1	31.0*	371.8	594.1	257.8	12.6
37000.0	242.6	-41.8	-53.1	27.7**	365.4	592.1	263.5	13.5
37500.0	237.1	-43.1	-55.2	24.4**	359.1	590.9	260.9	14.7
38000.0	231.8	-44.3	-57.5	21.2**	352.9	589.5	270.7	15.0
38500.0	226.9	-45.5	-59.8	17.9**	346.8	587.7	275.0	15.0
39000.0	222.6	-46.6	-62.5	14.6**	340.8	586.1	277.7	14.9
39500.0	218.4	-48.1	-65.4	11.3**	335.0	584.5	277.0	14.6
40000.0	214.5	-49.3	-63.8	8.0**	329.3	582.8	277.4	14.4
40500.0	210.8	-50.6	-73.3	4.8**	325.6	581.2	276.6	14.4
41000.0	207.1	-51.8	-81.5	1.5**	318.1	579.6	276.2	14.4
41500.0	203.4	-52.9			312.3	578.1	273.4	14.5
42000.0	200.7	-53.9			308.2	576.9	270.6	14.5
42500.0	198.1	-54.8			300.2	575.6	264.3	14.4
43000.0	195.5	-55.8			294.4	574.3	271.7	14.4
43500.0	192.3	-56.8			288.6	573.1	252.7	14.4

* At LAST 0.4F ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
24 JULY 1 12h00 MTS NDT
ASCENSION, NO. 67

UPPER AIR DATA
2050220000/

NW 30

TABLE 10 CON'T

GEOPHYSIC PRESSURE	TEMPERATURE	REL. HUM.	WIND DATA
ALITUDE MSL FEET	AIR DEGREES MILLIARS	DEWPOINT CENTIGRADE	WIND SPEED KNOTS
44000.0	175.0	-57.7	249.7
44500.0	170.8	-58.7	277.5
45000.0	169.8	-59.7	272.1
45500.0	162.8	-60.6	266.9
46000.0	158.9	-61.6	261.7
46500.0	155.2	-62.6	256.6
47000.0	151.5	-63.5	251.7
47500.0	147.8	-64.4	246.6
48000.0	144.1	-65.3	241.6
48500.0	140.6	-66.2	236.6
49000.0	137.1	-67.1	231.6
49500.0	133.7	-68.0	227.0
50000.0	130.4	-68.5	221.9
50500.0	127.1	-69.0	216.9
51000.0	123.9	-69.5	211.9
51500.0	120.8	-69.9	207.1
52000.0	117.7	-70.4	202.3
52500.0	114.8	-70.9	197.7
53000.0	111.9	-71.4	193.2
53500.0	109.1	-71.1	188.1
54000.0	106.3	-70.5	182.8
54500.0	103.7	-69.9	177.7
55000.0	101.1	-69.3	172.7
55500.0	98.5	-68.8	168.0
56000.0	96.1	-68.3	163.4
56500.0	93.7	-67.9	159.0
57000.0	91.3	-67.4	154.0
57500.0	89.1	-66.1	149.9
58000.0	86.9	-64.9	145.4
58500.0	84.8	-63.6	141.0
59000.0	82.7	-62.4	136.7
59500.0	80.7	-62.0	133.5
60000.0	78.7	-63.0	130.5
60500.0	76.6	-63.6	127.7
61000.0	75.0	-65.2	124.4
61500.0	73.1	-62.6	121.0
62000.0	71.4	-61.9	117.7
62500.0	69.6	-61.3	114.5
63000.0	68.0	-60.8	111.5
63500.0	66.3	-60.3	108.6

GEOPHYSIC COORDINATES
52.68497 LAT DEG
106.49714 LONG DEG

INDEX
OF
REFRACTION

WIND DIRECTION DEGREES (IN)	WIND SPEED KNOTS	INDEX OF REFRACTION
271.8	249.7	1.000063
277.5	249.4	1.000062
272.1	250.8	1.000061
266.9	261.2	1.000059
267.9	261.2	1.000058
266.7	270.3	1.000058
266.7	270.3	1.000057
256.4	279.2	1.000057
264.1	280.5	1.000056
262.8	280.0	1.000055
261.6	290.4	1.000054
260.4	290.9	1.000053
259.2	291.1	1.000052
258.0	293.1	1.000051
257.3	291.2	1.000049
256.7	310.2	1.000048
256.0	310.2	1.000047
255.5	324.3	1.000046
255.0	333.9	1.000045
254.7	333.9	1.000044
254.0	345.7	1.000044
253.4	345.7	1.000043
253.0	346.5	1.000042
252.5	346.5	1.000041
252.0	351.3	1.000040
251.5	351.3	1.000039
251.0	351.3	1.000038
250.5	351.3	1.000037
250.0	351.3	1.000036
249.5	351.3	1.000035
249.0	351.3	1.000034
248.5	351.3	1.000033
248.0	351.3	1.000032
247.5	351.3	1.000031
247.0	351.3	1.000030
246.5	351.3	1.000027
246.0	351.3	1.000026
245.5	351.3	1.000025
245.0	351.3	1.000024

STATION ALTITUDE 4310.40 FEET MSL
24 JULY 1200 HRS MDT
ASCENSION I.O. 67

PP, R AIR DATA
2150220107
NW 30

AT 0011 COORDINATES
32° 08' 49" LAT DEG
106.49714 LONG DEG

TABLE 10 CON'T

GEOM. TRL	PRESSURE	TEMPERATURE	REL. HUM.	SPEED OF	INL DATA	INL X
ALTITUDE MSL FEET	millibars	AIR DEWPNT CENTIGRADE	PERCENT	WIND KNOTS	WIND KNOTS (TN)	UP REFRACTIO.
04000.0	64.7	-59.9	105.8	560.9	104.4	1.000024
04500.0	65.2	-59.5	103.0	569.5	105.9	1.000023
05000.0	61.7	-58.9	100.3	570.3	103.6	1.000022
05500.0	60.2	-58.3	97.6	571.1	104.3	1.000022
06000.0	59.8	-57.7	95.1	571.9	102.9	1.000021
06500.0	57.4	-57.1	92.0	572.7	101.7	1.000021
07000.0	56.0	-56.5	90.1	573.5	101.9	1.000020
07500.0	54.7	-56.1	87.6	573.9	100.4	1.000020
08000.0	53.4	-56.2	85.8	573.8	100.0	1.000019
08500.0	52.2	-56.3	83.8	573.7	101.3	1.000019
09000.0	50.9	-56.3	81.9	573.6	102.5	1.000018
09500.0	49.7	-56.4	79.9	573.7	103.7	1.000018
10000.0	48.6	-56.2	78.0	573.4	101.9	1.000017
10500.0	47.4	-56.0	76.1	574.0	99.0	1.000017
11000.0	46.3	-55.9	74.3	574.2	97.6	1.000017
11500.0	45.2	-55.8	72.5	574.3	93.8	1.000016
12000.0	44.2	-55.8	70.8	574.5	89.1	1.000016
12500.0	43.1	-55.6	69.1	574.3	85.1	1.000015
13000.0	42.1	-55.8	67.5	574.3	81.7	1.000015
13500.0	41.1	-55.8	65.9	574.3	79.4	1.000015
14000.0	40.2	-55.6	64.3	574.7	77.3	1.000014
14500.0	39.2	-55.1	62.7	575.3	75.5	1.000014
15000.0	38.3	-54.5	61.1	576.0	73.6	1.000014
15500.0	37.4	-54.0	59.5	576.7	70.4	1.000013
16000.0	36.6	-53.5	58.0	577.3	70.4	1.000013
16500.0	35.7	-53.0	56.6	578.0	77.4	1.000013
17000.0	34.9	-52.5	55.1	578.7	78.4	1.000012
17500.0	34.1	-52.0	53.7	579.4	79.0	1.000012
18000.0	33.3	-51.5	52.4	580.0	79.7	1.000012
18500.0	32.5	-51.0	51.0	580.7	81.4	1.000011
19000.0	31.8	-50.5	49.7	581.4	84.4	1.000011
19500.0	31.1	-50.0	48.5	582.0	87.4	1.000011
20000.0	30.3	-49.4	47.2	582.7	90.2	1.000011
20500.0	29.6	-49.1	46.1	583.1	92.7	1.000010
21000.0	28.9	-49.0	45.0	583.2	94.0	1.000010
21500.0	28.3	-48.9	44.0	583.4	97.0	1.000010
22000.0	27.7	-48.8	43.0	583.6	99.1	1.000010
22500.0	27.0	-48.7	42.0	583.7	99.3	1.000009
23000.0	26.4	-48.6	41.0	584.0	99.3	1.000009
23500.0	25.8	-48.5	40.0	584.1	99.3	1.000009

STATION ALTITUDE 4010.40 FT. T MSL
 24 JULY 11 1200 HRS MDT
 ASPECT 0.0. 0.7

UPP, R AIR DATA
 2"50220067
 NW 30

STATION COORDINATES
 32.68497 LAT DEG
 106.49714 LON DEG

TABLE 10 CON'T

GEOMETRIC PRESSURE	PRESSURE ALTITUDE	TEMPERATURE AIR DEMPONT	REL.HUM. GM/CUBIC PERCENT	SPEED OF WIND DATA METER KNOTS	DIRECTION DEGREES (IN) KNOTS	INSTR. OF REFRACTION
34000.0	25.2	-48.3	39.1	584.1	29.3	1.000009
34500.0	24.7	-48.2	38.2	584.3	100.3	1.000009
35000.0	24.1	-48.1	37.3	584.4	101.6	1.000008
35500.0	23.6	-48.0	36.4	584.6	102.8	1.000008
36000.0	23.0	-47.5	35.6	585.2	104.1	1.000008
36500.0	22.5	-47.1	34.7	585.7	104.4	1.000008
37000.0	22.0	-46.6	33.8	586.3	104.0	1.000008
37500.0	21.5	-46.2	33.0	586.9	103.6	1.000007
38000.0	21.0	-45.8	32.2	587.5	103.2	1.000007
38500.0	20.6	-45.3	31.4	588.0	104.7	1.000007
39000.0	20.1	-44.9	30.7	588.6	104.0	1.000007
39500.0	19.6	-44.5	29.9	589.1	103.7	1.000007
40000.0	19.2	-44.0	29.2	589.7	100.6	1.000006
40500.0	18.8	-43.6	28.5	590.3	100.0	1.000006
41000.0	18.4	-43.2	27.8	590.8	100.0	1.000006

STATION ALTITUDE 4010.40 FEET MSL
24 JULY 01
ASCRISSU. (0. o7

MAIN TOWER LEVELS
2,502.20067
NW 30

TABLE 11

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE			REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KILOMETERS/HOUR
		AIR DEGREES	DEGREE CENTIGRADE	AIR DEGREE CENTIGRADE			
550.0	5021.	29.0	10.6	32.	59.0	208	
400.0	6778.	24.7	7.9	34.	559.8	30.9	
750.0	8620.	20.1	4.8	37.	531.0	10.0	
700.0	10558.	16.0	3.1	42.	427.9	30.5	
650.0	12608.	10.9	0.6	49.	243.0	40.3	
600.0	14778.	4.9	-0.1	70.	231.9	00.7	
550.0	17088.	-0.2	-6.5	62.	213.0	00.8	
500.0	19567.	-5.6	-12.5	58.	240.2	00.4	
450.0	22257.	-9.8	-30.8	16.	203.7	16.3	
400.0	25201.	-16.4	-34.0	20.	201.1	16.3	
350.0	28458.	-22.4	-29.7	51.	214.1	10.3	
300.0	32107.	-31.5	-36.0	64.	210.9	9.6	
250.0	36264.	-40.2	-50.4	32.	254.2	12.6	
200.0	41129.	-52.4	-52.4		275.2	14.4	
175.0	43927.	-57.7			249.5	14.4	
150.0	47073.	-63.9			286.4	19.8	
125.0	50686.	-69.3			314.2	17.3	
100.0	55034.	-69.1			68.3	5.5	
80.0	59479.	-62.7			36.3	7.6	
70.0	62179.	-61.4			106.1	12.5	
60.0	65338.	-58.2			104.2	13.9	
50.0	69131.	-56.4			103.4	17.0	
40.0	73790.	-55.5			77.1	24.9	
30.0	79894.	-49.2			91.4	36.4	
20.0	83826.	-48.3			99.5	37.4	
	88679.	-44.8					

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION NUMBER 4051.00 FET, SL
24 JULY 31 1330 hrs, MDT
ASCENSION, 140° 87'

SIGHTING LEVEL DATA
21500 JUB /
JALLET

SEODLIC COOKHILL,
33.16712 LAT LT.
106.49511 LONG LT.

TABLE 12

PRESSURE ALTIMETRIC MILLIBARS MSL FELT	TEMPERATURE DEGREES CENTIGRADE	TEMP. NATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
876.7 4051.0	37.1	12.5	23.0
879.4 4266.2	32.8	14.4	33.0
850.0 4966.6	30.8	15.1	34.0
806.4 6506.0	26.8	10.9	37.0
728.8 9403.6	18.8	7.3	47.0
700.0 10536.9	16.3	5.4	42.0
644.4 12829.9	10.9	-2.2	46.0
590.0 15185.6	4.4	-1.8	64.0
556.0 16803.0	1.0	-6.3	58.0
500.0 19575.5	-6.2	-10.9	69.0
479.2 20667.4	-7.3	-21.5	31.0
442.0 22723.3	-11.2	-26.8	26.0
400.0 25219.5	-16.5	-29.6	31.0
375.0 26807.9	-19.3	-31.1	34.0
360.0 27268.4	-20.2	-26.5	48.0
358.6 27897.9	-21.6	-30.5	44.0
350.9 28422.9	-23.2	-27.7	66.0
317.2 30830.8	-28.7	-32.3	71.0
309.3 31425.5	-28.7	-54.0	0.0
300.0 32142.4	-30.8	-57.2	53.0
286.8 33189.0	-33.7	-45.5	36.0
274.4 34206.2	-35.0	-44.7	36.0
250.0 36320.7	-40.6	-46.7	41.0
246.8 36791.1	-41.8	-50.9	36.0
200.0 41207.3	-51.7		
150.0 47191.5	-63.7		
127.4 50450.4	-69.4		
119.6 51694.9	-69.1		
105.0 54243.1	-72.1		
100.0 55193.2	-69.1		
85.2 58396.2	-64.1		
79.2 59871.5	-64.3		
70.0 62379.2	-62.0		
59.8 65627.2	-57.9		
50.0 69365.5	-56.7		
36.2 76186.5	-53.3		
30.0 80236.2	-47.9		
20.0 85141.4	-45.2		
16.4 93559.5	-42.0		
13.0 95799.7	-39.4		

STATION NUMBER 4051.00 FEET MSL
24 JULY 1330 HRS '47
ASCESSION NO. 07

SIGNIFICANT LEVELS
2050030087
JALLEN

STATION COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 12 CON'T

PRESSURE	GEOMETRIC MILLIBARS	ALTITUDE MSL FEET	TEMP, RATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
10.0	104773.8	-37.8		
9.8	105235.7	-37.7		

STATION, ALTITUDE 4551.00 FEET MSL
24 JULY 1947 1300 HRS ADI
ASCEND 101.00. 87

UPP. R. AIR UNITS
205000087
JALLET

TABLE 13

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DES. CUBIC METER	SPD. OF SOUND KNOTS	DIR. & DIST. DEGREES (IN)	WIND DATA SPD. KIOTS	INFLUX OF REFRACTION
4051.0	876.7	37.1	12.5	23.0	978.2	688.4	130.0	5.1
4500.0	863.5	32.1	14.0	33.3	978.5	689.1	147.0	4.5
5000.0	849.0	30.7	13.1	34.1	966.8	681.4	142.6	4.0
5500.0	834.6	29.4	12.4	35.0	954.7	679.9	137.2	3.4
6000.0	820.5	28.1	11.6	36.0	942.8	678.3	134.4	3.5
6500.0	806.6	26.8	10.9	37.0	931.0	676.8	171.0	3.6
7000.0	792.6	25.4	10.4	38.7	919.2	675.2	187.7	3.1
7500.0	778.9	24.1	9.8	40.4	907.6	673.6	209.5	2.7
8000.0	765.4	22.7	9.2	42.2	896.2	672.0	204.2	2.2
8500.0	752.0	21.3	8.5	43.9	884.9	670.4	202.1	2.5
9000.0	739.1	19.9	7.8	45.6	873.8	668.7	276.4	1.6
9500.0	726.3	18.6	6.9	46.6	862.8	667.1	245.6	2.1
10000.0	713.5	17.5	5.2	44.4	851.2	665.7	230.9	3.7
10500.0	700.9	16.4	3.5	42.2	839.8	664.3	237.8	5.1
11000.0	688.4	15.2	2.7	42.8	828.3	662.9	243.2	6.5
11500.0	676.1	14.0	1.9	43.7	816.9	661.5	230.6	7.4
12000.0	664.0	12.9	1.1	44.6	805.7	660.1	254.0	8.3
12500.0	652.1	11.7	0.3	45.4	794.7	658.7	251.9	8.6
13000.0	640.4	10.4	-0.3	47.3	783.9	657.2	247.6	8.8
13500.0	628.7	9.1	-0.5	51.1	773.3	655.6	240.5	9.0
14000.0	617.2	7.7	-0.8	54.9	762.9	654.0	238.3	9.4
14500.0	605.9	6.3	-1.2	58.8	752.7	652.4	239.0	9.9
15000.0	594.9	4.9	-1.6	62.6	742.7	650.6	242.5	9.7
15500.0	583.9	3.7	-2.7	62.8	732.2	649.3	248.4	9.2
16000.0	572.0	2.7	-4.1	61.0	721.5	648.0	232.7	8.8
16500.0	562.4	1.6	-5.5	59.1	711.0	646.7	236.5	8.4
17000.0	551.8	0.5	-6.6	58.8	700.7	645.5	239.0	8.5
17500.0	541.4	-0.8	-7.4	60.8	690.8	643.7	200.7	8.7
18000.0	531.1	-2.1	-8.2	62.7	681.0	642.1	203.2	8.8
18500.0	521.0	-3.4	-9.1	64.7	671.4	640.6	200.0	8.9
19000.0	511.1	-4.7	-9.9	66.7	661.9	639.0	208.5	9.4
19500.0	501.4	-6.0	-10.8	68.7	652.6	637.4	270.3	10.1
20000.0	491.8	-6.6	-14.3	54.2	641.8	636.5	212.0	10.0
20500.0	482.3	-7.1	-19.4	36.8	631.0	635.7	271.7	9.8
21000.0	472.0	-7.9	-22.3	30.2	620.8	634.7	200.0	8.7
21500.0	463.4	-8.9	-23.6	29.0	610.9	633.5	241.1	8.8
22000.0	454.7	-9.3	-24.9	27.8	601.2	632.4	211.4	11.2
22500.0	446.9	-10.8	-26.3	26.5	591.7	631.2	212.7	14.4
23000.0	437.1	-11.8	-27.1	26.6	582.3	630.0	219.5	17.7
23500.0	428.5	-12.8	-27.6	27.6	573.3	628.7	260.3	20.0

GEODDITIC COORDINATES
33.16712 LAT
106.49511 LONG

SECTION ALITUDE 4,51.00 FEET SL
24 JULY 1 1353 HRS R.D.
ASCEND. 100. 37

PPR ALA
20500 JUN 67
JALLEN

TABLE 13 CONT

DEPARTURE ALITUDE SL FEET	PIECEWORK MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM PERCENT	DEPTH OF SOUND METERS	DEPTH IN FEET	DATA DEPTH IN FEET REFRACTION	DEPTH IN FEET REFRACTION	
24000.0	420.0	-13.9	-28.2	28.6	564.1	627.4	203.0	21.2
24500.0	411.7	-15.0	-28.8	29.6	555.2	626.1	207.3	21.8
25000.0	400.5	-16.0	-29.3	30.6	546.5	624.8	210.1	21.9
25500.0	392.5	-17.0	-29.9	31.5	537.6	625.7	214.0	21.6
26000.0	387.5	-17.9	-30.3	32.5	528.6	622.6	202.9	20.8
26500.0	379.7	-18.8	-30.8	33.4	519.8	621.5	203.4	19.6
27000.0	374.1	-19.7	-29.8	39.8	511.1	620.4	200.4	18.3
27500.0	364.5	-20.7	-29.1	46.5	502.8	619.1	209.5	17.6
28000.0	357.1	-21.9	-29.9	48.3	494.9	617.7	211.9	17.4
28500.0	349.8	-23.4	-27.9	66.2	487.5	615.9	212.7	17.4
29000.0	342.5	-24.5	-23.8	67.2	479.6	614.5	211.0	17.4
29500.0	335.4	-25.7	-29.8	68.2	471.8	613.1	211.4	17.0
30000.0	326.4	-26.8	-30.7	69.3	464.2	611.6	212.2	16.2
30500.0	321.6	-27.9	-31.6	70.3	456.7	610.2	214.0	15.7
31000.0	314.9	-28.7	-32.7	67.9	448.0	609.2	216.0	15.6
31500.0	306.3	-28.9	-34.3	59.3	439.0	609.0	213.9	15.6
32000.0	301.8	-30.4	-36.6	54.4	433.0	607.1	220.5	15.7
32500.0	292.4	-31.8	-39.3	47.2	426.3	605.3	214.3	16.3
33000.0	289.1	-33.2	-42.3	39.1	419.8	603.6	221.3	17.3
33500.0	282.9	-34.1	-43.9	36.0	412.3	602.4	220.4	18.2
34000.0	276.9	-34.7	-44.5	36.0	404.5	601.6	217.6	18.9
34500.0	270.9	-35.8	-45.2	36.7	397.5	600.3	217.5	18.8
35000.0	265.1	-37.1	-46.2	37.9	391.0	598.6	213.9	18.0
35500.0	259.2	-38.4	-47.1	39.1	384.6	596.9	222.5	17.4
36000.0	253.6	-39.8	-48.1	40.2	378.4	595.2	220.8	17.4
36500.0	246.6	-41.1	-49.5	39.1	372.2	593.5	230.1	17.7
37000.0	242.5	-42.3	-51.7	34.3**	365.8	592.0	240.6	17.8
37500.0	237.0	-43.4	-53.8	30.2**	359.3	590.5	245.1	18.1
38000.0	231.6	-44.5	-56.0	26.1**	352.9	589.1	249.9	18.4
38500.0	226.4	-45.6	-58.3	22.1**	346.6	587.8	252.7	18.9
39000.0	221.3	-46.8	-60.8	18.0**	340.5	586.5	256.0	19.0
39500.0	216.3	-47.9	-63.7	13.9**	334.4	584.2	253.1	19.4
40000.0	211.4	-49.0	-67.1	9.8**	325.5	583.3	257.2	19.5
40500.0	206.6	-50.1	-71.7	5.8**	322.7	581.8	271.1	19.5
41000.0	201.9	-51.2	-80.3	1.7**	317.0	560.3	272.5	19.7
41500.0	197.2	-52.3	-	-	311.0	579.0	270.1	19.9
42000.0	192.5	-53.5	-	-	305.0	577.7	267.6	20.0
42500.0	187.9	-54.3	-	-	299.2	576.3	264.2	18.9
43000.0	183.5	-55.3	-	-	295.4	575.0	260.1	17.9
43500.0	179.1	-56.3	-	-	287.8	573.7	256.0	16.7

* AIR LAT, T OFF, AND R. RELATIVELY TINY VALUES WAS USED IN INTERPOLATION.

STATION ALTITUDE 4051.00 FT ELEV
24 JULY 1961 1330 HRS NDT
ASCENDS 1.0. 0.7

UPPER AIR DATA
2500000000/
JALLET

TABLE 13 CON'T

GEOMETRIC ALITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES (IN) KNOTS	WIND DATA SPEED KNOTS	INFLUX OF REFRAC 101.
44000.0	174.9	-57.3		202.2	572.4	205.7	15.4	1.000003
44500.0	170.7	-58.3		276.8	571.0	200.7	14.5	1.000002
45000.0	169.7	-59.3		271.5	569.7	207.2	14.7	1.000000
45500.0	162.7	-60.3		266.3	568.4	273.4	15.1	1.000059
46000.0	153.8	-61.3		261.2	567.0	200.1	16.3	1.000058
46500.0	153.1	-62.3		256.2	565.7	205.9	17.8	1.000057
47000.0	151.4	-63.3		251.3	564.5	200.0	19.4	1.000056
47500.0	147.7	-64.2		246.3	563.1	292.1	20.9	1.000055
48000.0	144.0	-65.1		241.2	561.9	294.0	22.4	1.000054
48500.0	140.5	-66.0		236.2	560.7	294.9	22.9	1.000053
49000.0	137.9	-66.9		231.4	559.5	205.6	23.1	1.000052
49500.0	135.6	-67.7		226.6	558.4	200.7	22.8	1.000050
50000.0	133.3	-68.6		221.9	557.2	299.9	20.3	1.000049
50500.0	127.1	-69.4		217.3	556.1	303.9	17.9	1.000048
51000.0	123.9	-69.3		211.7	556.5	308.7	13.9	1.000047
51500.0	120.8	-69.1		206.3	556.4	310.0	9.0	1.000046
52000.0	117.6	-69.5		201.4	556.0	342.3	4.9	1.000045
52500.0	114.8	-70.0		196.9	555.2	324.8	2.5	1.000044
53000.0	111.9	-70.6		192.5	554.9	78.7	1.1	1.000043
53500.0	109.1	-71.2		188.2	553.6	115.0	1.3	1.000042
54000.0	106.3	-71.8		183.9	552.8	110.6	.7	1.000041
54500.0	103.6	-71.3		178.8	555.5	100.4	.1	1.000040
55000.0	101.0	-69.7		173.0	555.6	199.6	.6	1.000039
55500.0	98.5	-68.6		167.8	557.1	198.0	1.3	1.000037
56000.0	96.1	-67.8		163.0	558.2	190.4	2.1	1.000036
56500.0	93.7	-67.1		158.4	559.3	108.1	3.2	1.000035
57000.0	91.4	-66.3		153.9	560.3	104.3	4.4	1.000034
57500.0	89.1	-65.5		149.5	561.4	178.0	5.1	1.000033
58000.0	86.9	-64.7		145.3	562.4	103.1	5.1	1.000032
58500.0	84.8	-64.1		141.3	563.3	148.9	5.4	1.000031
59000.0	82.7	-64.2		137.9	563.2	138.5	5.9	1.000031
59500.0	80.7	-64.2		134.5	563.1	130.5	6.5	1.000030
60000.0	78.7	-64.2		131.2	563.2	124.4	7.2	1.000029
60500.0	76.8	-63.7		127.7	563.8	123.0	7.8	1.000028
61000.0	74.9	-63.3		124.3	564.4	121.7	8.4	1.000028
61500.0	73.1	-62.8		121.1	565.0	120.2	9.1	1.000027
62000.0	71.3	-62.3		117.9	565.6	118.3	9.8	1.000026
62500.0	69.6	-61.8		114.7	566.3	110.7	10.5	1.000025
63000.0	67.9	-61.2		111.6	567.1	114.5	11.1	1.000025
63500.0	66.3	-60.6		108.7	568.0	111.6	11.7	1.000024

STATION ALTITUDE 4,510.00 FEET (S.L.)
24 JULY 1 1330 HRS (DT)
ASCENTION, 40. 67

PP-R AIR DATA
2050050987
JALLEN

GEODETIC COORDINATES
33.1612 LAT DEG
106.49511 LONG DEG

TABLE 13 CON'T

OP. ALTITUDE IN SL FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	SLANT GM/CUBIC METER	SLANT KMOTS	SLANT DATA REFRACT. INDEX	INFLUX OF REFRACTION
04000.0	940.7	-60.0	105.7	969.8	109.3	12.4	1.000024
04100.0	939.3	-59.3	102.9	969.7	108.5	13.2	1.000023
04200.0	938.7	-58.7	100.1	970.5	108.4	14.2	1.000022
04300.0	938.1	-58.1	97.5	971.4	108.3	15.1	1.000022
04400.0	937.8	-57.8	95.0	971.7	105.9	15.8	1.000021
04500.0	937.6	-57.6	92.7	971.9	103.0	16.4	1.000021
04600.0	937.5	-57.5	90.4	972.2	100.4	17.0	1.000020
04700.0	937.3	-57.3	88.2	972.4	98.1	16.7	1.000020
04800.0	937.1	-57.1	86.1	972.6	95.8	16.1	1.000019
04900.0	937.0	-57.0	84.0	972.8	93.2	15.6	1.000019
05000.0	936.8	-56.8	81.9	973.0	89.4	16.3	1.000018
05050.0	936.6	-56.6	79.9	973.2	85.7	17.2	1.000018
05100.0	936.4	-56.4	78.0	973.6	82.5	18.3	1.000017
05150.0	936.1	-56.1	76.1	973.9	79.9	19.2	1.000017
05200.0	935.9	-55.9	74.2	974.2	77.0	20.1	1.000017
05250.0	935.6	-55.6	72.4	974.6	75.4	21.0	1.000016
05300.0	935.4	-55.4	70.6	974.9	73.3	21.4	1.000016
05350.0	935.1	-55.1	68.9	975.2	71.3	21.9	1.000015
05400.0	934.9	-54.9	67.2	975.6	69.8	22.6	1.000015
05450.0	934.1	-54.6	65.5	975.9	69.7	24.0	1.000015
05500.0	934.1	-54.4	63.9	976.2	69.6	25.4	1.000014
05550.0	934.0	-54.1	62.4	976.5	70.0	27.0	1.000014
05600.0	933.9	-53.9	60.8	976.9	73.4	29.2	1.000014
05650.0	933.6	-53.6	59.3	977.2	75.5	31.3	1.000013
05700.0	933.4	-53.4	57.9	977.5	76.2	33.5	1.000013
05750.0	933.2	-52.9	56.4	978.2	61.6	35.7	1.000013
05800.0	933.0	-52.2	55.0	979.1	84.6	38.0	1.000012
05850.0	933.0	-51.5	53.5	979.9	67.9	39.8	1.000012
05900.0	933.0	-50.9	52.2	980.6	94.2	39.3	1.000012
05950.0	932.5	-50.2	50.8	981.7	100.4	39.3	1.000011
06000.0	931.8	-49.5	49.5	982.5	106.7	39.7	1.000011
06050.0	931.0	-48.9	48.2	983.4	116.3	39.2	1.000011
06100.0	930.3	-48.2	47.0	984.3	119.9	38.7	1.000010
06150.0	929.6	-47.8	45.8	984.8	111.6	38.3	1.000010
06200.0	929.0	-47.7	44.6	985.0	109.6	37.8	1.000010
06250.0	928.3	-47.5	43.7	985.2	107.0	37.4	1.000010
06300.0	927.7	-47.4	42.7	985.4	104.5	37.1	1.000010
06350.0	927.1	-47.2	41.7	985.6	102.9	36.3	1.000009
06400.0	926.5	-47.1	40.8	985.8	102.9	35.2	1.000009
06450.0	925.9	-46.9	39.8	986.0	102.6	34.1	1.000009

STATION #L11104 4651.30 FEET MSL
24 JULY 1330 HRS MDT
ASCTN101 140. 87

1. PPTR AIR DATA
2150030087
JALLEN
TABLE 13 CON'T

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL.HUM. METER	SHFTD W. MM/CUBIC METERS	DIRECTION DEGREES (TIN)	WIND DATA SPD KNOTS	INDEX OF REFRACTION
4000.0	25.3	-46.8		38.9	586.2	102.6	33.1	1.000009
3450.0	24.7	-46.6		38.0	586.4	101.5	32.9	1.000008
3300.0	24.2	-46.5		37.1	586.6	100.4	32.7	1.000008
3150.0	23.6	-46.3		36.3	586.8	99.3	32.5	1.000008
3000.0	23.1	-46.2		35.4	587.0	97.6	33.1	1.000008
2850.0	22.6	-46.0		34.6	587.2	95.7	34.0	1.000008
2700.0	22.0	-45.8		33.8	587.3	93.4	34.9	1.000008
2650.0	21.6	-45.7		33.0	587.5	93.1	35.9	1.000007
2600.0	21.1	-45.5		32.2	587.7	94.7	36.8	1.000007
2550.0	20.6	-45.4		31.5	587.9	96.1	37.8	1.000007
2500.0	20.1	-45.2		30.6	588.1	97.5	38.8	1.000007
2450.0	19.7	-44.9		30.0	588.5	97.2	38.6	1.000007
2400.0	19.2	-44.6		29.3	589.0	96.7	38.3	1.000007
2350.0	18.8	-44.2		28.6	589.5	96.1	37.9	1.000006
2300.0	18.4	-43.9		28.0	589.9	94.6	37.4	1.000006
2250.0	18.0	-43.5		27.3	590.4	91.3	36.9	1.000006
2200.0	17.6	-43.1		26.6	590.9	89.0	36.5	1.000006
2150.0	17.2	-42.8		26.0	591.3	84.6	36.2	1.000006
2100.0	16.8	-42.4		25.4	591.8	84.1	37.4	1.000006
2050.0	16.4	-42.0		24.8	592.2	83.6	38.7	1.000006
2000.0	16.1	-41.8		24.2	592.6	83.5	40.0	1.000006
1950.0	15.7	-41.5		23.7	592.9	83.7	41.2	1.000006
1900.0	15.4	-41.3		23.1	593.2	85.1	42.1	1.000006
1850.0	15.0	-41.0		22.6	593.5	86.5	43.0	1.000005
1800.0	14.7	-40.8		22.1	593.8	87.6	44.0	1.000005
1750.0	14.4	-40.5		21.6	594.2	86.4	44.9	1.000005
1700.0	14.1	-40.3		21.1	594.5	87.7	45.9	1.000005
1650.0	13.8	-40.0		20.6	594.8	87.0	46.8	1.000005
1600.0	13.5	-39.8		20.1	595.1	86.2	47.7	1.000004
1550.0	13.2	-39.5		19.6	595.4	85.6	48.2	1.000004
1500.0	12.9	-39.3		19.2	595.7	85.3	48.1	1.000004
1450.0	12.6	-39.2		18.8	596.0	84.9	48.0	1.000004
1400.0	12.3	-39.1		18.4	596.0	84.4	47.8	1.000004
1350.0	12.1	-38.9		17.9	596.2	85.0	47.9	1.000004
1300.0	11.8	-38.8		17.5	596.4	86.0	48.2	1.000004
1250.0	11.5	-38.7		17.2	596.5	88.3	48.6	1.000004
1200.0	11.3	-38.6		16.8	596.7	89.0	49.0	1.000004
1150.0	11.1	-38.4		16.4	596.9			1.000004
1100.0	10.8	-38.3		16.0	597.1			1.000004
1050.0	10.6	-38.1		15.7	597.2			1.000003

STATION ALTITUDE 4,510.00 FEET MSL
24 JULY 1 1330 HRS MDT
ASSEMBLY NO. 07

PP. R AIR DATA
2050030087

JALLEN

TABLE 13 CON'T

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEW POINT DEGREES	REL.HUM. PERCENT	REL.HUM. CUBIC METER	DEENSITY GM/CUBIC METER	SHED OF SOUND	REL.HUM. SOUND	DIRCTION DEGREES (IN)	DIRCTION DEGREES (IN)	DATA SPEED KNOTS	INFLUX OF REFRACTION.
10400.0	10.3	-38.0		10.3	15.3	597.4					1.000003	
10450.0	10.1	-37.9		10.1	15.0	597.6					1.000003	
10500.0	9.9	-37.8		9.9	14.7	597.7					1.000003	

OUTLINE COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

STATION, LITTLE 45100 FEET ASL
24 JULY 1935 HRS MDI
ASCR. 510.40. 17

ANALOGY LEVELS
2.500.000/

JALLEH

STATION COORDINATES
33.16712 LAT DE
106.49511 LONG DE

TABLE 14

PRESSURE GRADIENT MILLIBARS	FELT	TEMPERATURE DEGREES CENIGRADE	DE POINT PERCENT	RELATIVE HUMIDITY		DEGRADATION DEGREES (TN)	OPTICAL KNIGHTS
				RELATIVE HUMIDITY	DE POINT PERCENT		
850.0	4963.	30.8	13.1	34.	143.1	4.9	
800.0	6732.	26.2	10.7	38.	178.0	3.3	
750.0	8583.	21.1	8.4	44.	261.4	2.3	
700.0	10527.	16.3	3.4	42.	238.2	5.2	
650.0	12579.	11.5	-1.1	46.	251.0	6.7	
600.0	14754.	5.6	-1.4	61.	240.0	10.0	
550.0	17068.	0.3	-6.8	59.	259.5	6.5	
500.0	19549.	-6.2	-10.9	69.	270.2	10.1	
450.0	22236.	-10.3	-25.6	27.	214.7	12.9	
400.0	25178.	-16.5	-29.6	31.	205.0	22.0	
350.0	28434.	-23.3	-27.9	66.	212.7	17.4	
300.0	32079.	-30.8	-37.2	53.	220.9	15.7	
250.0	36242.	-40.6	-48.7	41.	233.9	17.6	
200.0	41108.	-51.7			271.5	19.8	
175.0	43914.	-57.3			258.7	15.4	
150.0	47065.	-63.7			290.7	19.9	
125.0	50179.	-69.3			306.7	15.9	
100.0	55029.	-69.1			198.8	9.9	
80.0	59473.	-64.3			128.5	6.7	
70.0	62166.	-62.0			117.2	10.3	
60.0	65324.	-58.0			108.3	15.1	
50.0	69106.	-56.7			98.9	10.9	
40.0	73772.	-54.4			69.5	25.5	
30.0	79894.	-47.9			110.6	36.6	
25.0	83351.	-46.7			102.2	33.1	
20.0	88123.	-45.2			97.0	35.9	
15.0	95037.	-41.0			86.0	43.1	
10.0	104205.	-37.8					

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTIMETER 4,010.00 FEET ASL
24 JULY 1961 1500 HRS, ED
ACROSS 100.00.

SIGNIFICANT LEVEL DATA
20502-0000
NW 30

DELT T10 COORDINATES
32.88497 LAT 116
106.49714 LONG

TABLE 15

PILOT'S SURGE MILLIHARS	GEOMETRIC ALTITUDE MSL FEET	TEMP, RADIANT DEGREES CENIGRADE	TEMP, AIR DEGREES CENIGRADE	REL. HUM. PERCENT
877.6	4010.4	36.2	11.1	22.0
871.4	4222.5	36.0	12.2	24.0
850.0	4963.1	33.3	10.5	25.0
739.0	9025.0	20.6	6.5	40.0
700.0	10554.6	16.6	4.9	46.0
649.0	12654.5	11.4	1.6	51.0
623.2	13764.1	8.5	-1.0	49.0
586.2	15690.1	3.1	-4.6	57.0
537.4	17718.7	-1.0	-6.2	58.0
513.2	18922.1	-4.1	-11.3	57.0
506.0	19596.7	-5.6	-15.2	55.0
489.2	20159.5	-6.5	-15.2	59.0
481.4	20572.4	-7.2	-17.3	44.0
465.8	21415.7	-8.1	-20.2	18.0
400.0	25249.4	-16.6	-34.2	20.0
384.2	26237.7	-18.4	-39.5	5.0
354.8	28179.4	-22.0	-35.5	28.0
341.2	29121.8	-24.3	-30.7	55.0
321.4	30547.5	-27.5	-39.1	32.0
308.6	31505.5	-30.0	-46.5	18.0
301.0	32165.3	-32.2	-47.5	20.0
283.8	33449.8	-34.3	-49.3	20.0
277.6	33941.9	-34.6	-48.7	22.0
256.0	36336.9	-40.8		
206.0	41214.2	-52.5		
162.4	45546.0	-62.9		
156.0	47147.9	-65.7		
133.2	49512.6	-68.4		
121.6	51310.0	-69.5		
107.2	53773.9	-72.2		
106.0	55153.2	-69.5		
95.8	56393.4	-69.4		
91.6	57083.0	-65.9		
78.4	59979.0	-66.2		
76.0	62270.6	-61.9		
64.6	63917.3	-60.3		
59.0	65797.6	-57.3		
51.6	68590.3	-58.3		
56.0	69247.2	-57.0		
42.6	72918.9	-54.2		

STATION ALTITUDE 4,610.0 FEET MSL
24 JULY 1951 1500 HRS, WDF
ASCENSION ISL.

SIGNIFICANT LEVEL DATA
2150220000
NW 30

OUTLINE COORDINATES
32° 08' 49" LAT N
106° 49' 14" LONG E

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
39.0	74486.7	-55.1	
34.4	77168.6	-49.9	
30.0	80137.6	-48.5	
22.4	86524.8	-46.6	
21.0	89022.3	-45.1	
17.8	91609.7	-43.3	

TABLE 15 CON'T

STATION ALTITUDE 11040 FT. ELEVATION
24 JULY 1500 HRS MDT
ASCTA 510.40. 0.8

UPP, R ALT. 101A
21502201000
NW 30

TABLE 16

GEOM. ALT. ALTIMETER IN SL FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DE. SITY GM/CUBIC METER	SOUND KILOTS	IND. DATA DIRECT REFLECTION	REFL. OF REFLECTION
4010.4	877.6	16.2	11.1	22.0	982.7	687.2	1.000271
4500.0	809.3	35.0	11.6	24.4	970.2	615.9	1.000271
5000.0	840.9	35.2	10.6	25.1	959.9	603.8	1.000266
5500.0	834.4	31.6	10.3	27.0	940.5	612.1	1.000263
6000.0	820.2	30.1	10.0	28.6	937.0	608.3	1.000259
6500.0	800.2	28.5	9.6	30.7	925.6	608.1	1.000256
7000.0	792.4	26.9	9.1	32.5	914.8	607.7	1.000253
7500.0	776.9	25.4	8.5	34.4	904.0	674.9	1.000249
8000.0	765.6	23.4	7.9	36.2	893.4	675.1	1.000245
8500.0	752.5	22.2	7.3	38.1	882.9	671.3	1.000241
9000.0	739.6	20.7	6.6	39.9	872.0	669.5	1.000237
9500.0	726.7	19.4	6.1	41.9	861.2	667.9	1.000234
10000.0	715.9	18.1	5.6	43.6	849.9	660.4	1.000230
10500.0	701.4	16.7	5.0	45.8	838.9	654.9	1.000226
11000.0	688.9	15.5	4.3	47.1	827.6	663.4	1.000222
11500.0	676.6	14.3	3.5	48.3	816.5	661.4	1.000218
12000.0	664.5	13.0	2.7	49.4	805.5	660.4	1.000214
12500.0	652.6	11.8	1.9	50.6	794.7	658.9	1.000210
13000.0	640.9	10.5	0.6	50.4	784.1	657.4	1.000205
13500.0	629.2	9.2	-0.8	49.5	773.7	655.7	1.000200
14000.0	617.0	7.0	-1.9	50.0	763.4	654.1	1.000196
14500.0	605.4	6.4	-2.7	52.1	753.2	652.4	1.000192
15000.0	593.3	5.0	-3.5	54.1	743.2	650.2	1.000189
15500.0	584.3	3.6	-4.3	56.2	733.3	649.1	1.000185
16000.0	575.4	2.5	-5.1	57.2	722.8	647.7	1.000182
16500.0	562.7	1.5	-6.0	57.4	712.0	640.4	1.000178
17000.0	552.2	0.5	-6.9	57.6	701.5	642.2	1.000175
17500.0	541.9	-0.6	-7.4	57.9	690.6	644.0	1.000171
18000.0	531.6	-1.7	-8.9	57.8	680.8	642.5	1.000168
18500.0	521.6	-3.0	-10.2	57.4	671.2	641.2	1.000164
19000.0	511.7	-4.3	-11.5	56.8	661.7	639.4	1.000161
19500.0	501.9	-5.4	-12.9	55.3	651.8	638.0	1.000157
20000.0	492.2	-6.2	-13.2	57.9	641.4	637.1	1.000155
20500.0	482.8	-7.1	-16.5	46.6	631.2	635.9	1.000150
21000.0	472.4	-7.7	-21.9	30.8	620.7	632.0	1.000144
21500.0	464.2	-8.5	-28.3	18.0	610.5	634.2	1.000139
22000.0	455.1	-9.4	-29.1	10.3	600.8	632.0	1.000137
22500.0	446.1	-10.5	-29.8	18.6	591.5	631.5	1.000135
23000.0	437.4	-11.6	-30.6	18.8	582.3	630.2	1.000132
23500.0	428.7	-12.7	-31.4	19.1	573.3	620.0	1.000130

STATION ALTITUDE 4010.00 FEET MSL
24 JULY 01 1500 HRS MDT
ASUMPTION NO. 08

WFO, R A1K UNIT,
2150220000Z
NW 30

TABLE 16 CON'T

GEOMETRIC ALTITUDE M.S.L FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	DEWPOINT PERCENT	REL.HUM. PERCENT	SPLTS OF GM/CUBIC METER	SOUND KNOTS	WIND DATA DEGREES (INI) KNOTS	WIND CHURN DEPTH	WIND FRACTION OF REFRACTION	NOTE
10000.0	11000.0	12000.0	13000.0	14000.0	15000.0	16000.0	17000.0	18000.0	19000.0	
24000.0	420.3	-13.8	-32.2	19.3	564.4	627.5	202.9	19.4	1.000118	
24500.0	412.0	-14.9	-33.0	19.6	555.7	626.1	203.4	20.5	1.000120	
25000.0	403.9	-16.1	-33.8	19.9	547.1	624.8	202.5	20.7	1.000124	
25500.0	395.9	-17.1	-34.0	21.3	538.3	623.5	201.5	20.8	1.000122	
26000.0	387.9	-18.0	-33.6	23.6	529.4	622.4	200.4	20.2	1.000120	
26500.0	380.1	-18.9	-33.8	25.4	520.6	621.3	199.2	19.5	1.000118	
27000.0	372.4	-19.8	-34.3	26.2	511.9	620.2	203.3	17.7	1.000116	
27500.0	364.8	-20.7	-34.8	27.0	503.3	619.0	208.8	16.0	1.000114	
28000.0	357.4	-21.7	-35.3	27.7	495.0	617.9	211.1	14.6	1.000112	
28500.0	350.1	-22.8	-33.3	37.2	487.0	616.6	212.5	13.2	1.000111	
29000.0	342.9	-24.0	-31.1	51.5	479.3	615.1	211.2	13.2	1.000109	
29500.0	335.8	-25.1	-32.7	48.9	471.5	613.6	208.0	14.1	1.000107	
30000.0	328.9	-26.3	-35.6	40.8	463.9	612.2	206.4	15.0	1.000105	
30500.0	322.0	-27.4	-38.7	32.8	456.4	610.8	209.6	15.8	1.000103	
31000.0	315.3	-28.7	-42.3	25.4	449.2	609.2	210.8	16.5	1.000101	
31500.0	308.7	-30.0	-46.5	18.1	442.2	607.5	210.0	16.6	1.000099	
32000.0	302.1	-31.6	-47.2	19.5	435.8	605.4	210.3	16.6	1.000098	
32500.0	295.7	-32.7	-48.7	20.0	428.4	604.1	211.5	16.8	1.000096	
33000.0	289.4	-33.6	-48.7	20.0	420.7	603.0	212.0	17.0	1.000094	
33500.0	283.1	-34.5	-49.2	20.2	413.0	602.1	212.3	16.4	1.000092	
34000.0	277.1	-34.8	-49.1	21.5**	404.9	601.5	211.3	15.5	1.000091	
34500.0	271.1	-36.0	-52.2	16.9**	398.2	599.9	213.8	14.2	1.000089	
35000.0	265.2	-37.3	-55.9	12.3**	391.7	598.3	219.1	12.8	1.000087	
35500.0	259.4	-38.6	-60.6	7.7**	385.3	596.6	220.6	12.3	1.000086	
36000.0	253.7	-39.9	-68.2	31.1*	379.9	595.5	233.5	13.4	1.000084	
36500.0	248.1	-41.2	-74.0	372.7	593.3	239.3	14.5	1.000083		
37000.0	242.5	-42.4	-74.0	360.1	591.8	241.9	14.9	1.000082		
37500.0	237.0	-43.6	-74.0	359.7	590.3	244.3	15.2	1.000080		
38000.0	231.7	-44.8	-74.0	353.4	588.7	249.5	14.8	1.000079		
38500.0	226.4	-46.0	-74.0	347.3	587.2	255.9	14.4	1.000077		
39000.0	221.3	-47.2	-74.0	341.2	585.6	261.5	14.4	1.000076		
39500.0	216.3	-48.4	-74.0	335.3	584.1	266.4	14.6	1.000075		
40000.0	211.4	-49.6	-74.0	329.5	582.5	270.9	14.7	1.000073		
40500.0	206.6	-50.8	-74.0	323.7	580.9	275.4	14.5	1.000072		
41000.0	202.0	-52.0	-74.0	316.1	579.4	279.7	14.3	1.000071		
41500.0	197.3	-53.2	-74.0	312.4	577.8	281.6	14.1	1.000070		
42000.0	192.6	-54.4	-74.0	306.7	576.2	283.5	13.9	1.000068		
42500.0	188.0	-55.6	-74.0	301.0	574.6	286.0	14.2	1.000067		
43000.0	183.5	-56.8	-74.0	295.5	573.0	288.0	14.5	1.000066		
43500.0	179.2	-58.0	-74.0	290.1	571.5	290.1	14.6	1.000065		

* At least one assumed relative humidity value was used in the simulation.

STATION ALTITUDE 4010.00 FT MSL
24 JULY 01 1500 HRS MDT
ASCENSION ISL. 68

UPPER AIR DATA
2050220000
NW 30

GEODETIC COORDINATES
32.08497 LAT DEG
186.49714 LONG DEG

TABLE 16 CON'T

GEODETIC PRESSURE ALITUDE MSL FEET	TEMPERATURE AIR DEGREES MILLIBARS	DEWPOINT TEMP CENTIGRADE	REL. HUM. PERCENT	GM/CUBIC METER	SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN) REFRACTION INDEX OR REFRACTION
44000.0	174.9	-59.2	284.8	569.9	272.1	14.6 1.000003
44500.0	170.8	-60.4	279.6	568.3	279.2	14.6 1.000002
45000.0	160.7	-61.6	274.5	566.6	272.3	14.8 1.000001
45500.0	162.8	-62.8	269.5	565.0	270.3	15.2 1.000000
46000.0	158.8	-63.7	264.1	565.8	20.9	15.6 1.000005
46500.0	154.9	-64.6	259.7	562.6	209.0	16.8 1.000006
47000.0	151.1	-65.4	253.4	561.5	295.9	18.2 1.000006
47500.0	147.4	-66.1	246.0	560.6	299.3	19.5 1.000005
48000.0	143.7	-66.7	242.5	559.8	300.0	20.6 1.000004
48500.0	140.2	-67.2	237.1	559.0	301.6	21.6 1.000005
49000.0	136.7	-67.8	231.9	558.2	304.6	20.2 1.000002
49500.0	133.3	-68.4	226.8	557.5	308.2	18.8 1.000001
50000.0	129.9	-68.7	221.4	557.0	310.7	15.2 1.000049
50500.0	126.7	-69.0	216.2	556.6	313.4	9.9 1.000046
51000.0	123.5	-69.3	211.1	556.2	319.4	4.9 1.000047
51500.0	120.4	-69.7	206.2	555.7	255.5	1.5 1.000046
52000.0	117.4	-70.3	201.5	554.9	173.9	2.9 1.000045
52500.0	114.4	-70.8	197.0	554.2	129.9	4.5 1.000044
53000.0	111.5	-71.4	192.5	553.4	137.7	2.7 1.000043
53500.0	108.7	-71.9	188.2	552.7	98.6	2.1 1.000042
54000.0	106.0	-71.6	183.3	552.9	67.7	2.2 1.000041
54500.0	103.3	-70.8	177.8	554.2	64.9	1.9 1.000040
55000.0	100.7	-69.6	172.5	555.6	60.7	1.5 1.000038
55500.0	98.2	-69.5	167.9	556.0	108.3	2.4 1.000037
56000.0	95.7	-69.4	163.6	556.0	126.6	4.6 1.000036
56500.0	93.3	-68.9	159.1	556.8	122.9	6.9 1.000035
57000.0	91.0	-68.3	153.2	560.3	137.5	7.4 1.000034
57500.0	89.7	-65.9	149.2	560.8	142.2	7.5 1.000033
58000.0	88.5	-66.0	145.5	560.7	146.7	7.7 1.000032
58500.0	84.4	-66.0	142.0	560.6	150.3	7.7 1.000031
59000.0	82.3	-66.1	138.5	560.5	170.5	6.0 1.000030
59500.0	80.3	-66.2	135.1	560.5	180.6	6.5 1.000029
60000.0	78.3	-66.2	131.8	560.5	154.2	7.5 1.000029
60500.0	76.4	-65.2	128.0	561.4	127.2	6.4 1.000029
61000.0	74.5	-64.3	124.5	562.0	169.2	10.4 1.000028
61500.0	72.7	-63.3	120.7	564.3	124.1	11.7 1.000027
62000.0	70.9	-62.4	117.3	564.8	99.9	13.0 1.000026
62500.0	69.2	-61.7	114.0	569.5	97.1	14.1 1.000025
63000.0	67.6	-61.2	111.0	567.2	93.2	13.7 1.000025
63500.0	65.9	-60.7	108.1	567.8	97.4	13.4 1.000024

STATION ALTITUDE 4010.40 FEET MSL
24 JULY '41 150n HRS MDI
ASSEMBLY, IN. 0.8

UPP, R AIR DATA
2050220060
NW 30

STATION COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

TABLE 16 CONT'

GEOPH. TELL	PRESSURE ALTITUDE MSL FEET MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	STATE OF WATER	WIND DATA DEGREES (IN) KNOTS	WIND SPEED KNOTS	INDEX OF REFRACTION
04000.0	64.3	-60.2	105.2	568.5	100.3	13.1	1.000023
04500.0	62.8	-59.4	102.4	569.6	98.6	14.1	1.000023
05000.0	61.3	-58.6	99.5	570.7	97.0	15.1	1.000022
05500.0	59.9	-57.8	98.8	571.7	95.7	16.1	1.000022
06000.0	58.4	-57.0	94.3	572.3	94.9	16.7	1.000021
06500.0	57.0	-57.6	92.2	572.0	94.2	17.4	1.000021
07000.0	55.7	-57.7	90.1	571.8	93.5	18.0	1.000020
07500.0	54.4	-57.9	88.0	571.6	93.1	17.8	1.000020
08000.0	53.1	-58.1	86.0	571.3	92.6	17.6	1.000019
08500.0	51.8	-58.3	84.0	571.1	92.4	17.4	1.000019
09000.0	50.6	-57.5	81.7	572.1	91.9	17.5	1.000018
09500.0	49.4	-56.8	79.6	573.0	90.9	17.5	1.000018
10000.0	48.2	-56.4	77.5	573.3	99.9	17.6	1.000017
10500.0	47.1	-56.0	75.0	574.0	85.4	19.4	1.000017
11000.0	46.0	-55.7	73.7	574.5	81.7	21.4	1.000016
11500.0	44.9	-55.3	71.8	575.0	78.6	23.4	1.000016
12000.0	43.9	-54.9	70.0	575.5	76.8	25.1	1.000016
12500.0	42.8	-54.5	68.3	576.0	75.4	26.8	1.000015
13000.0	41.8	-54.2	66.6	576.4	74.2	28.6	1.000015
13500.0	40.9	-54.5	65.1	576.0	74.3	30.4	1.000014
14000.0	39.9	-54.8	63.7	575.6	75.4	32.5	1.000014
14500.0	38.0	-55.1	62.3	575.3	76.4	34.5	1.000014
15000.0	36.1	-54.1	60.6	576.6	77.0	36.4	1.000013
15500.0	37.2	-53.1	58.9	577.9	81.2	37.6	1.000013
16000.0	36.3	-52.2	57.3	579.1	84.6	38.9	1.000013
16500.0	35.5	-51.2	55.7	580.4	87.6	40.3	1.000012
17000.0	34.7	-50.2	54.2	581.7	90.9	40.1	1.000012
17500.0	33.9	-49.7	52.6	582.3	94.1	39.3	1.000012
18000.0	33.1	-49.5	51.6	582.6	97.5	38.6	1.000011
18500.0	32.4	-49.3	50.3	582.9	102.6	38.0	1.000011
19000.0	31.6	-49.0	49.1	583.2	101.1	36.7	1.000011
19500.0	30.9	-48.8	48.0	583.5	101.0	35.4	1.000011
20000.0	30.2	-48.6	46.8	583.8	102.1	34.1	1.000010
20500.0	29.5	-48.4	45.7	584.1	101.6	32.9	1.000010
21000.0	28.8	-48.2	44.7	584.2	100.4	31.7	1.000010
21500.0	28.2	-48.1	43.6	584.4	99.0	30.6	1.000010
22000.0	27.6	-47.9	42.6	584.5	97.4	29.4	1.000009
22500.0	26.9	-47.8	41.6	584.6	96.2	29.3	1.000009
23000.0	26.3	-47.6	40.7	585.0	95.4	29.4	1.000009
23500.0	25.7	-47.5	39.7	585.2	94.6	29.5	1.000009

STATION ALTITUDE 4310.40 FEET MSL
24 JULY 61 1500 HRS MDT
ASCENSION ISL.

UPP.R AIR DATA
2050220000
NW 30

MODEL 111 COORDINATES
32.08497 LAT DEG
106.49714 LONG DEG

TABLE 16 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CELIGRADE	REL.HUM. PERCENT	DEWPOINT DEGREES CELIGRADE	DE.SITY GM/CUBIC METER	SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
84000.0	23.1	-47.4			38.8	3804	95.7	29.7	1.00009
84500.0	24.6	-47.2			37.9	3806	95.6	30.4	1.00008
85000.0	24.0	-47.1			37.0	3808	95.4	31.2	1.00008
85500.0	23.5	-46.9			36.1	3801	95.3	31.9	1.00008
86000.0	23.9	-46.8			35.3	3804	92.6	32.6	1.00008
86500.0	22.4	-46.6			34.5	3804	91.5	33.2	1.00008
87000.0	21.9	-46.3			33.7	3807	90.4	33.9	1.00007
87500.0	21.4	-46.0			32.9	3801	89.4	34.5	1.00007
88000.0	20.9	-45.7			32.1	3805	89.6	34.2	1.00007
88500.1	20.5	-45.4			31.3	3809	89.7	34.0	1.00007
89000.0	20.0	-45.1			30.6	3803	89.8	33.8	1.00007
89500.0	19.6	-44.8			29.9	3807			1.00007
90000.0	19.1	-44.4			29.1	3802			1.00006
90500.0	18.7	-44.1			28.5	3800			1.00006
91000.0	18.3	-43.7			27.8	3901			1.00006
91500.0	17.9	-43.4			27.1	3905			1.00006

STATION, ALTITUDE, 4010.40 FEET MSL
 24 JULY 01 1500 HRS MDT
 ASCENSIO, NO. 68

MONITOR LEVELS
 215022U000
 NW 30

GEODETIC COORDINATES
 32.68497 LAT E
 106.49714 LONG E

TABLE 17

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE			REL. HUM. PERCENT	WIND DATA DEGREES (TN)	SPEED KNOTS
		AIR DEGREES	DEGREE CENTIGRADE	DEGREE CENTIGRADE			
650.0	4960.	33.3	10.6	25.	69.4	3.7	
600.0	6739.	27.8	9.4	31.	101.0	6.8	
750.0	8597.	21.9	7.1	38.	211.0	3.2	
700.0	10544.	16.6	4.9	46.	249.3	12.6	
650.0	12599.	11.5	1.7	51.	265.1	10.5	
600.0	14774.	5.6	-3.1	53.	248.0	4.9	
550.0	17087.	.2	-7.1	56.	267.1	6.4	
500.0	19569.	-5.6	-13.2	55.	250.2	9.0	
450.0	22260.	-10.0	-29.5	16.	204.1	16.1	
400.0	25202.	-16.6	-34.2	20.	202.0	20.8	
350.0	28457.	-22.8	-33.3	37.	212.5	15.2	
300.0	32101.	-32.2	-47.5	20.	210.8	16.7	
250.0	36257.	-40.8			237.6	14.1	
200.0	41114.	-52.5			280.4	14.2	
175.0	43903.	-59.2			272.2	14.6	
150.0	47020.	-65.7			297.5	16.6	
125.0	50621.	-69.2			316.2	7.4	
100.0	54963.	-69.5			59.6	1.4	
80.0	59378.	-66.2			178.5	8.4	
70.0	62057.	-61.9			98.2	15.6	
60.0	65212.	-57.9			95.9	16.0	
50.0	68936.	-57.0			91.3	17.5	
40.0	73657.	-54.8			75.2	32.1	
30.0	79794.	-48.5			102.2	33.9	
25.0	83741.	-47.3			93.7	24.8	
20.0	88603.	-45.1			89.3	33.8	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
24 JULY 1970 1700 HRS PDT
ASCTIS 101.40. 00

SUPERFICIAL LEVEL DATA

20500 JUNO

JALLEN

TABLE 18

STATION COORDINATES
33.16712 LAT DEG,
106.49511 LONG DEG

PRESSURE GEOMETRIC MILLIBARS MSL FELT	ALTITUDE OF GROES CENTIGRAVE	TEMPERATURE AIR DEGREES CENTIGRAVE	REL. HUM. PERCENT
673.8	4051.0	34.7	58.0
869.0	4250.1	35.7	56.0
850.0	4874.4	33.5	26.0
700.0	10487.5	17.8	43.0
649.0	12594.2	11.9	56.0
587.4	15306.0	4.3	75.0
569.5	16132.9	2.2	83.0
553.0	16913.2	.8	71.0
528.2	18121.5	-1.8	70.0
500.0	19549.3	-5.4	70.0
479.4	20633.5	-6.8	43.0
448.4	22337.6	-10.8	31.0
438.6	22895.1	-12.2	38.0
431.2	23322.5	-13.3	72.0
411.4	24497.5	-14.7	41.0
404.4	24925.1	-14.9	38.0
400.0	25197.2	-15.6	42.0
394.0	25572.3	-16.1	55.0
390.6	25787.0	-16.5	47.0
343.4	28928.8	-23.9	24.0
337.2	29366.7	-23.9	23.0
360.0	32136.7	-31.0	40.0
250.0	36303.5	-41.5	37.0
233.0	37863.6	-45.6	
200.0	41163.5	-52.9	
183.8	42942.3	-57.1	
166.2	45017.6	-62.1	
150.0	47089.4	-65.8	
134.0	49212.6	-69.0	
124.2	50029.8	-68.5	
167.4	53672.0	-73.0	
100.0	55065.0	-69.5	
78.8	59843.1	-61.9	
70.0	62268.5	-60.8	
57.4	66365.2	-58.7	
50.0	69258.3	-54.3	
45.0	71496.7	-53.1	

STATION ALTITUDE 4,510.00 FEET MSL
24 JULY 01 1700 HRS MDT
ASCENSION 140. 88

UPPER AIR DATA
2050030080
JALLEN

GEODETIC COORDINATES
53.16712 LAT LE,
106.49511 LONG LE,

TABLE 19

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND SPEED KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	875.8	34.7	18.3	38.0	979.8	686.7	220.0	5.1
4500.0	860.7	34.8	12.9	26.8	967.3	685.9	208.0	4.8
5000.0	845.3	33.1	12.4	28.3	956.4	684.0	194.0	4.6
5500.0	831.8	31.6	11.9	29.7	944.4	682.4	180.6	5.1
6000.0	817.5	30.4	11.3	31.0	932.6	680.6	164.7	3.9
6500.0	803.5	29.0	10.8	32.3	920.9	679.2	214.5	2.7
7000.0	789.7	27.6	10.2	33.7	909.5	677.6	255.2	4.3
7500.0	775.2	26.2	9.5	35.0	898.2	675.9	268.3	6.2
8000.0	764.9	24.8	8.8	36.4	887.1	674.3	273.8	7.7
8500.0	749.8	23.4	8.1	37.7	876.1	672.7	275.1	8.1
9000.0	737.0	22.0	7.4	39.0	865.4	671.0	270.3	8.7
9500.0	724.3	20.6	6.9	40.4	854.7	669.4	260.4	8.9
10000.0	711.9	19.2	5.9	41.7	844.2	667.7	265.3	8.9
10500.0	699.7	17.8	5.1	43.1	833.9	666.1	269.6	8.9
11000.0	687.2	16.4	4.8	46.2	823.0	664.4	291.8	9.1
11500.0	675.0	15.0	4.4	49.2	812.3	662.8	294.4	9.0
12000.0	663.0	13.6	4.0	52.3	801.8	661.2	297.6	8.8
12500.0	651.2	12.2	3.5	55.4	791.5	659.6	298.2	8.2
13000.0	639.4	10.8	3.0	58.8	781.0	657.9	293.0	7.3
13500.0	627.7	9.4	2.5	62.3	770.6	656.5	264.9	6.2
14000.0	616.3	8.0	2.0	65.8	760.4	654.6	275.4	5.5
14500.0	605.1	6.6	1.4	69.4	750.4	652.9	264.4	5.0
15000.0	594.0	5.2	.7	72.9	740.5	651.3	262.7	5.0
15500.0	583.2	3.8	.1	76.9	730.6	649.6	241.0	5.2
16000.0	572.3	2.5	-.3	81.7	720.4	646.1	240.7	6.0
16500.0	561.7	1.5	-2.0	77.4	709.8	646.8	251.6	6.9
17000.0	551.2	.6	-4.0	70.9	699.2	645.6	255.9	8.1
17500.0	540.8	-.5	-5.1	70.5	688.9	644.3	253.9	9.3
18000.0	530.6	-1.5	-6.3	70.1	678.7	642.9	250.9	10.4
18500.0	520.6	-2.5	-7.4	70.0	669.0	641.4	247.1	10.9
19000.0	510.7	-4.0	-8.7	70.0	659.4	639.9	242.0	11.2
19500.0	500.9	-5.3	-9.9	70.0	650.1	638.3	234.2	11.3
20000.0	491.3	-6.0	-12.7	58.8	639.5	637.3	225.9	11.7
20500.0	481.9	-6.6	-16.2	46.3	629.0	636.4	217.9	12.6
21000.0	472.6	-7.7	-18.8	40.4	619.4	635.1	211.0	13.4
21500.0	463.4	-8.8	-20.9	36.9	610.2	633.7	205.2	14.1
22000.0	454.4	-10.0	-23.0	33.4	601.1	632.2	202.9	15.2
22500.0	445.5	-11.2	-24.2	33.0	592.1	630.7	205.4	16.6
23000.0	436.8	-12.5	-21.6	46.3	583.1	629.5	208.5	17.9
23500.0	428.1	-13.5	-18.2	67.3	573.7	628.1	212.2	19.0

STATION LATITUDE 45°1.00 FEET MSL
24 JULY 01 1700 HRS MDT
ASCENSUS, NO. 88

PP, R AIR DATA
2150030088
JALLEN

GEODETIC COORDINATES
33°16'7.12 LAT DEC
106°49'51.11 LONG DEC

TABLE 19 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	415.7	-14.1	-21.3	54.1	563.6	627.3	213.2	1.009132
24500.0	411.4	-14.7	-25.0	41.0	554.1	626.5	212.6	1.000128
25000.0	405.2	-15.1	-25.9	39.1	543.9	626.0	210.6	1.000125
25500.0	395.1	-16.0	-23.4	52.5	534.9	625.0	209.6	1.000124
26000.0	387.2	-17.0	-26.0	45.4	526.2	623.7	207.0	1.000121
26500.0	379.3	-18.2	-27.9	41.8	518.0	622.3	205.9	1.000119
27000.0	371.7	-19.4	-30.0	38.1	509.9	620.8	205.5	1.000117
27500.0	364.1	-20.5	-32.1	34.5	501.9	619.3	207.5	1.000114
28000.0	356.7	-21.7	-34.3	30.8	494.1	617.9	210.3	1.000112
28500.0	349.5	-22.9	-36.6	27.1	486.4	616.4	210.1	1.000110
29000.0	342.4	-23.9	-38.7	23.8	478.4	615.1	210.7	1.000108
29500.0	335.3	-24.2	-39.0	23.8	469.2	614.7	223.1	1.000106
30000.0	328.3	-25.5	-39.0	26.9	461.8	613.1	228.0	1.000104
30500.0	321.5	-26.8	-39.1	30.0	454.5	611.5	234.0	1.000102
31000.0	314.7	-28.1	-39.3	33.0	447.3	609.9	236.9	1.000101
31500.0	308.2	-29.4	-39.6	36.1	440.3	608.3	239.4	1.000101
32000.0	301.7	-30.6	-40.0	39.7	433.4	606.7	240.5	1.000100
32500.0	295.3	-31.9	-41.0	39.7	426.3	605.1	240.7	1.000098
33000.0	289.9	-33.2	-42.2	39.4	419.3	603.6	234.6	1.000094
33500.0	284.6	-34.4	-43.5	39.0	412.4	602.0	229.3	1.000093
34000.0	279.5	-35.7	-44.7	38.7	405.6	600.4	224.0	1.000093
34500.0	270.5	-37.0	-45.9	38.3	398.9	598.8	219.0	1.000090
35000.0	264.7	-38.2	-47.2	37.9	392.4	597.2	221.5	1.000088
35500.0	258.9	-39.5	-48.4	37.6	386.0	595.6	227.1	1.000086
36000.0	253.3	-40.7	-49.6	37.2	379.7	593.9	233.7	1.000085
36500.0	247.8	-42.0	-52.0	32.3*	373.4	592.3	241.2	1.000084
37000.0	242.3	-43.3	-56.9	20.5**	367.2	590.0	247.0	1.000082
37500.0	236.9	-44.6	-64.5	8.6**	361.1	588.9	230.6	1.000080
38000.0	231.5	-45.9			354.9	587.3	234.4	1.000079
38500.0	226.2	-47.0			348.5	585.8	236.4	1.000078
39000.0	221.1	-48.1			342.2	584.4	235.3	1.000076
39500.0	216.0	-49.2			336.0	583.0	239.6	1.000075
40000.0	211.1	-50.3			330.0	581.5	237.5	1.000073
40500.0	206.2	-51.4			324.0	580.1	230.5	1.000072
41000.0	201.5	-52.5			318.2	579.6	225.6	1.000071
41500.0	196.8	-53.7			312.4	577.1	220.9	1.000070
42000.0	192.2	-54.9			306.8	575.6	225.7	1.000068
42500.0	187.7	-56.1			301.2	574.0	224.2	1.000067
43000.0	183.5	-57.2			295.7	572.4	220.4	1.000066
43500.0	178.9	-58.4			290.3	570.8	218.2	1.000065

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN INTERPOLATION.

SATION ALTITUDE 4351.00 FEET MSL
24 JULY 11 1700 HRS MDT
ASCNTR. NO. 88

UPPER AIR DATA
20500300000
JALLEN

TABLE 19 CON'T

GEOM. ALT.	PRESSURE MILLIBARS	TEMPERATURE DEGREES CEL. / GRADE	REL. HUM. PERCENT	DENSITY GM./CUBIC METER	SPD. OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPD. KNOTS	INDEX OF REFRACTION
44600.0	174.6	-59.6		284.9	569.0	277.6	14.0	1.000063
44500.0	170.4	-60.9		279.7	567.6	276.5	14.8	1.000062
45000.0	169.3	-62.1		274.5	566.8	276.5	15.5	1.000061
45500.0	162.3	-63.0		269.0	564.8	279.9	16.2	1.000060
46000.0	159.3	-63.9		263.5	563.6	282.0	17.0	1.000059
46500.0	154.4	-64.7		258.2	562.4	268.5	16.1	1.000058
47000.0	150.7	-65.6		252.9	561.2	295.7	19.3	1.000056
47500.0	149.9	-66.4		247.6	560.1	295.7	20.9	1.000055
48000.0	143.3	-67.2		242.3	559.1	297.1	22.6	1.000054
48500.0	139.7	-67.9		237.2	558.1	297.2	23.3	1.000053
49000.0	130.2	-68.7		232.1	557.1	291.7	19.9	1.000052
49500.0	132.9	-68.9		226.6	556.8	263.9	16.7	1.000050
50000.0	129.5	-68.8		220.8	557.0	270.2	13.2	1.000049
50500.0	120.3	-68.6		215.1	557.2	248.2	10.5	1.000048
51000.0	125.1	-68.8		209.9	556.9	220.4	10.0	1.000047
51500.0	120.0	-69.6		205.4	555.9	216.2	10.0	1.000046
52000.0	117.0	-70.4		201.0	554.8	211.9	10.0	1.000045
52500.0	114.0	-71.1		196.7	553.7	208.1	9.6	1.000044
53000.0	111.2	-71.9		192.4	552.6	204.0	8.9	1.000043
53500.0	108.3	-72.7		188.3	551.5	199.5	8.3	1.000042
54000.0	105.6	-72.2		183.1	552.3	195.9	7.8	1.000041
54500.0	102.9	-70.9		177.3	554.0	211.8	7.5	1.000040
55000.0	100.3	-69.7		171.8	555.7	195.5	8.2	1.000039
55500.0	97.9	-68.8		166.8	556.9	200.3	9.2	1.000038
56000.0	95.4	-68.0		162.1	558.0	205.7	10.2	1.000036
56500.0	93.1	-67.2		157.5	559.1	206.0	10.8	1.000035
57000.0	90.8	-66.4		153.0	560.1	208.1	11.4	1.000034
57500.0	88.6	-65.6		148.7	561.2	217.7	8.1	1.000033
58000.0	86.4	-64.8		144.5	562.3	242.0	4.9	1.000032
58500.0	84.3	-64.0		140.4	563.4	297.1	3.3	1.000031
59000.0	82.2	-63.2		136.4	564.4	21.1	4.2	1.000030
59500.0	80.2	-62.4		132.5	565.5	45.0	8.7	1.000029
60000.0	78.2	-61.3		128.9	566.3	12.2	11.0	1.000028
60500.0	76.3	-61.6		125.7	566.6	64.2	13.3	1.000027
61000.0	74.5	-61.4		122.5	566.9	97.3	15.8	1.000027
61500.0	72.7	-61.1		119.4	567.2	155.4	15.6	1.000027
62000.0	70.9	-60.9		116.4	567.5	113.6	15.6	1.000026
62500.0	69.2	-60.7		113.5	567.7	107.8	14.7	1.000025
63000.0	67.6	-60.4		110.6	568.2	110.4	14.0	1.000025
63500.0	65.9	-60.2		107.9	568.5	93.7	13.5	1.000024

STATION ALTITUDE 4351.00 FT ET MSL
21 JULY 31
ASCENSION 1.0.
ASCR:SI011.0.

IPPC-R AIR UNIA
20500 JU0088
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 19 CON'T

DEUTERIUM ALTITUDE MSL FELT	PRESSURE MILLIBARS	TEMPERATURE AIR DEWEPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	SPEED OF SOUND METER KNOTS	WIND DATA DIRECTION DEGREES (IN) SPEED KNOTS	INDEX OF REFRACTION
64000.0	64.4	-59.9		105.2	668.9	87.3
64500.0	62.8	-59.7		102.5	569.2	82.4
65000.0	61.3	-59.4		99.9	569.0	84.3
65500.0	59.9	-59.1		97.4	569.9	86.1
66000.0	58.4	-58.9		95.0	570.3	81.4
66500.0	57.0	-58.5		92.6	570.8	76.8
67000.0	55.7	-57.7		90.1	571.8	73.2
67500.0	54.4	-57.0		87.6	572.8	69.7
68000.0	53.1	-56.2		85.3	573.8	66.6
68500.0	51.8	-55.5		83.0	574.8	60.1
69000.0	50.6	-54.7		80.7	575.8	65.6
69500.0	49.4	-54.2		78.6	576.5	
70000.0	48.3	-53.9		76.7	576.8	
70500.0	47.2	-53.6		74.8	577.2	
71000.0	46.1	-53.4		73.0	577.6	

STATION ALTIMETER 4351.00 FEET MSL
 24 JULY 01 1700 HRS MDI
 ASCTN 100.00 03

MANDATORY LEVELS
 2050030080
 JALLEN
 TABLE 20

WORLD FILE COORDINATES,
 33.16712 LAT LT,
 106.49511 LON DEG

MILLIBARS	PRESSURE FEET	GEOPOTENTIAL DEGREES	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND DATA	
					DIR. POINT DEGREES (TN)	SPD KNOBS
650.0	4871.	33.5	12.5	28.	197.0	4.8
800.0	6655.	28.6	10.6	33.	231.5	3.0
750.0	8520.	23.4	8.1	38.	275.2	6.2
700.0	10478.	17.8	5.1	43.	289.8	6.9
650.0	12539.	12.0	3.5	56.	296.0	6.1
600.0	14718.	5.0	1.1	71.	259.0	5.0
550.0	17036.	-5.5	-4.2	71.	256.2	6.2
500.0	19523.	-5.4	-10.0	70.	233.3	11.4
450.0	22214.	-10.6	-24.2	32.	204.1	15.8
400.0	25156.	-15.6	-25.5	42.	210.0	16.0
350.0	28419.	-22.8	-36.4	27.	214.7	17.8
300.0	32073.	-31.0	-40.1	40.	240.2	15.3
250.0	36225.	-41.5	-50.4	37.	238.0	15.7
200.0	41065.	-52.9			287.1	15.9
175.0	43848.	-59.5			278.0	15.9
150.0	46963.	-65.8			293.0	14.5
125.0	50558.	-68.5			257.0	10.0
100.0	54896.	-60.5			195.9	6.3
80.0	59340.	-62.4			43.2	6.7
70.0	62056.	-60.8			111.3	15.2
60.0	65214.	-59.2			85.9	15.3
50.0	69000.	-54.3				

IN
DATE